

US Army Corps
of Engineers
Baltimore District

CONSTRUCTION SPECIFICATIONS

NEW WORK DREDGING

**COAN RIVER,
NORTHUMBERLAND COUNTY,
VIRGINIA**

INVITATION NO. **DACW31-03-B-0007**

CONTRACT NO.

DATE: **DEC 17, 2002**

NEW WORK DREDGING, COAN RIVER, NORTHUMBERLAND COUNTY, VIRGINIA

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AND
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SECTION 1 - SPECIAL CLAUSES

1. COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK: The Contractor shall be required to commence dredging under this contract within 15 calendar days after the date of receipt by him/her of Notice to Proceed, to prosecute said work diligently and to complete the entire work ready for use not later than 45 calendar days after the date of receipt by him of notice to proceed. All dredging shall be completed within 45 days of Notice to Proceed. Due to environmental concerns dredging is permitted from 1 October through 30 November and from 16 March through 31 May. Additional mobilization and demobilization as a result of time extensions granted under this contract will be the responsibility of the Contractor. Liquidated damages will not be charged during the environmental constraint periods of 1 December through 15 March and 1 June through 30 September. Should the total quantity of material to be paid for and actually removed under the contract exceed the limit established in the FAR 52.211-18 VARIATIONS IN ESTIMATED QUANTITY, additional time will be allowed at the rate of one calendar day for each 2,000 cubic yards in excess of the established limit. The time stated for completion shall include final clean-up of the premises.

2. ESTIMATED QUANTITIES: The total estimated quantities of material necessary to be removed from within the specified limits, as shown on the contract drawings exclusive of allowable overdepth, to complete the work is 5,467 cubic yards place measurement. The maximum amount of allowable overdepth dredging is estimated to be 2,385 cubic yards place measurement.

3. PHYSICAL DATA: Information and data furnished or referred to below are furnished for information only and it is expressly understood that the Government will not be responsible for any interpretation or conclusion drawn therefore by the Contractor.

(a) Physical conditions indicated on the contract drawings and in the specifications are the result of site investigations by surveys and/or probing. A copy of the boring logs and sieve analyses performed on the sediment samples taken from the Federal channel in Coan River are located at the end of the specifications, along with a map showing the approximate sample locations. Boring logs and sieve analyses indicate that the material to be removed by new work dredging consists principally of sand, silt, gravel, shell, clay and combinations thereof.

(b) Weather Conditions: Complete weather records and reports may be obtained from the U.S. Weather Bureau. The Contractor shall satisfy himself as to the hazards likely to arise from weather conditions during the dredging period. The site of work is exposed, and suspension of work may at times be necessary during extreme storm periods. Tidal currents may have an adverse effect on dredging operations. The mean range tide is 1.27 feet, with greater fluctuations occurring during high winds and storm periods.

(c) Transportation Facilities: The Contractor shall make his own investigation of transportation facilities in the vicinity of the work.

(d) Conditions of Channel: The best information available as to the present conditions of the proposed Federal channel in Coan River is shown on the contract drawings. The Contractor shall coordinate with the local

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utility companies for locations of under water utility cables which will obstruct dredging operation. The Contractor shall report any possible obstructions to the Contracting Officer for instruction prior to starting work.

(e) Channel Traffic: Channel traffic consists of commercial vessels, commercial seafood boats, recreational craft, etc. and may cause minor delays to the dredging operations.

(f) Obstruction of Channel: The Government will not undertake to keep the channel free from vessels or other obstructions, except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army, in accordance with the provisions of Section 7 of the River and Harbor Act approved 8 August 1917. The Contractor shall be required to conduct the work in such manner as to obstruct navigation as little as possible, and in case the Contractor's plant so obstructs the channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessels to such an extent as may be necessary to afford a safe practicable passage. Upon completion of the work the Contractor shall promptly remove his plant, including pipeline, ranges, buoys, piles, and other marks placed by him under the contract in navigable waters or on shore.

(g) Navigation Aids: The Contractor shall not relocate or move any aids to navigation that have been established by the U.S. Coast Guard. If it becomes necessary to have any aid to navigation moved in order to complete dredging operations under this contract, the Contractor shall notify the Commander AOW, Fifth U.S. Coast Guard District, in writing with a copy furnished to the Contracting Officer not less than 30 days prior to such need for movement. The Contractor shall notify the U.S. Coast Guard of the approximate time the navigation aid may be relocated to its original position.

(h) Laying of Submerged Pipe Lines and Obstruction of Channel: Should it become necessary in the performance of this contract to use a submerged pipeline across a navigable channel the Contractor shall notify the Contracting Officer in writing to be received in the District Office at least 15 working days prior to the desired closure date. This notification shall furnish the following:

(1) Location (Channel Centerline Stationing) and depth (over the top of the pipeline) at which the submerged line will be placed.

(2) The desired length of time the channel is to be closed.

(3) The date and hour placement or removal will commence.

(4) The date and hour of anticipated completion.

(i) Notice To Mariners: Should the Contractor, during dredging operations, encounter any objects on the channel bottom which could be a hazard to navigation, he shall immediately notify the Contracting Officer or his authorized representative as to the location of said object and any other pertinent information necessary for the Contracting Officer or his authorized representative to put out a Notice to Mariners.

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(j) Bridge-to-Bridge Radio Communication: In order that radio communication may be made with passing vessels, all dredges engaged in work under this contract shall be equipped with bridge to bridge radio telephone equipment. The radio telephone equipment shall operate on a single channel very high frequency (VHF), FM, on a frequency of 156.65 MHz per second, with low power output having a communication range of approximately ten (10) miles. The frequency has been approved by the Federal Communications Commission.

(k) Notification of the Coast Guard: Prior to commencement of work on this contract, the Contractor shall notify the Commander AOW, Fifth U.S. Coast Guard District of his intended operations to dredge and request that it be published in the Local Notice to Mariners. This notification must be given in sufficient time so that it appears in the Notice to Mariners at least one week prior to the commencement of this dredging operation.

(l) Shellfish Areas: Shellfish areas exist in the vicinity of the area to be dredged and the placement area. Dredging and placement operations shall be conducted in such a manner as to avoid possible damage to these grounds. The Contractor is advised to exercise caution in his dredging and any other operations attendant with dredging (such as the construction of trestles; the movement and anchoring of barges, vessels, or other equipment; the placing or moving of anchors, and leaking pipelines) to prevent damage to all oyster grounds.

4. LAYOUT OF WORK: CENABEN 1984 APR

4.1 The Contractor shall be responsible for the layout of his work. The Government will furnish the channel centerline coordinates and bearings at the beginning point, at each point where the channel changes direction, and at the ending point; and the channel toe coordinates and bearings of both sides of the channel at the beginning point, at each point where the channel changes direction, and at the ending point. The Government will furnish the coordinates and the monument descriptions of the existing horizontal and vertical control within the project area. The Contractor shall be responsible, by utilizing this data, to dredge within the dredging prisms that are shown on the contract drawings. The Contractor shall maintain, preserve, repair or replace, at his own expense, any gages or location markers that are lost, damaged or destroyed for any reason subsequent to their initial establishment by the Contracting Officer until authorized to remove them. The Contractor may, at his option, establish offset stakes, back-up stakes, and gages to be utilized in re-establishing any baseline, ranges and gages that are lost, damaged or destroyed. The contract completion time will not be increased due to work delays that result from the failure of the Contractor to maintain, repair or replace the Government established baselines, ranges and gages.

4.2 The Contractor shall give the Contracting Officer or his authorized representative adequate advance notice of the commencement of work in order to assure the timely completion of the before dredging survey and the establishment of necessary dredging layouts. The notice shall be furnished at least 15 days prior to mobilization of the dredge plant to the work site. It is understood that the survey made in response to this notice will constitute the before dredging survey and any subsequent surveys occasioned through Contractor delays may be charged against the Contractor at a rate of

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\$1,200.00 per day. If the Contractor fails to provide adequate advance notice, the Contracting Officer will not be responsible for any delays in the commencement of work caused by incomplete dredging layouts.

4.3 Datum and Bench Marks: The plane of reference, mean lower low water as established by National Ocean Survey, MLLW (NOS), shall be used in these specifications for dredging operations.

4.4 Horizontal Control: Horizontal control data will be provided to the Contractor on request. This request should be made to the Hydrographic Survey Section, Navigation Branch, telephone number (410) 962-6063.

5. SIGNAL LIGHTS:

5.1 The Contractor shall display lights and conduct his operations in accordance with the General Regulations of the Department of the Army and of the Coast Guard governing lights and day signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels working on wrecks, dredges, and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipe lines, and day signals to be displayed by vessels of more than 65-feet in length moored or anchored in a fairway or channel, and the passing by other vessels of floating plant working in navigable channels, as set forth in Commandant U.S. Coast Guard Instruction M16672.2, Navigation Rules: International-Inland (Comdtinst M16672.2), or 33 CFR 81 Appendix A (International) and 33 CFR 84 through 33 CFR 89 (Inland) as applicable. (DAEN-PRP-1984 JUL)

5.2 Marking of Floating Dredge Pipeline: The Contractor shall mark and maintain the floating dredge pipeline in accordance with U.S. Coast Guard navigation rules, inland - NX5-88.15. As a minimum the Contractor shall mark the pipeline with amber lights visible on all points of the horizon for 2 miles on a clear night. The lights shall flash at 50-70 times per minute and be placed between 1 and 3.5 meters above the water. Spacing shall be sufficient to clearly show the pipeline length and course. Where the pipeline crosses a navigable channel spacing shall be every 10 meters. Two red lights, visible on all points of the horizon, shall be displayed at each end of the floating pipeline. They shall be arranged vertically 1 meter apart with the lower light at the same elevation as the amber lights.

6. ACCOMMODATIONS AND MEALS FOR INSPECTORS: (1965 APR OCE)

6.1 Omit

6.2 If the Contractor maintains on this work establishment for the subsistence of his own employees, he shall, when required, furnish to inspectors employed on the work and to all Government agents who may visit the work on official business, meals of a quality satisfactory to the Contracting Officer. The meals furnished will be paid for by the Government at a rate of \$3.50 per person for each meal.

7. CONTRACTOR QUALITY CONTROL: Contractor Quality Control is the means by which the Contractor verifies that his construction/dredging complies with the requirements of the contract specifications. Contractor Quality Control shall be adequate to cover all construction/dredging

operations including both onsite and offsite fabrication and will be keyed to the proposed construction/dredging sequence.

7.1 General: The Contractor shall provide and maintain an effective quality control program that complies with the Special Contract Requirement INSPECTION OF CONSTRUCTION. The Contractor's Quality Control Program through inspection, testing, equipment/system operation, and reporting shall demonstrate and document the extent of compliance of all work with the standards and quality established by the contract documents. Inspection and test reports shall make reference to specific drawing and/or specification requirements and shall state inspection/test procedures with both expected and actual results.

The burden-of-proof of contract compliance is placed on the Contractor and not assumed by the Government. The Contractor's Quality Control will not be accepted without question.

7.2 Quality Control Plan: Within 7 calendar days after receipt of Notice to Proceed the Contractor shall furnish his Quality Control Plan and three copies thereof to the Contracting Officer or his authorized representative for review and approval. The plan shall cover in detail each feature of the project including dredging and disposal operations. Copies of the Quality Control Plan shall be made available on the dredge. The Quality Control Plan the Contractor proposes to implement shall identify the personnel, procedures, instructions, records, and forms, and as a minimum, shall include:

- (a) A description of the quality management organization.
- (b) The number, classifications, qualifications, duties, responsibilities and authorities of personnel. A copy of the letter signed by an authorized official of the firm, which describes the responsibilities and delegates the authorities of the system manager, shall be furnished.
- (c) Procedures for processing reports, samples and other submittals.
- (d) Quality control activities to be performed, including those of subcontractors.
- (e) Compliance inspections recorded on the Daily Quality Control Report and the Daily Report of Operations, a sample of which is shown at the end of these specifications.

Construction or dredging will be permitted to begin only after approval of the Quality Control Plan, or approval of that portion of the plan applicable to the particular feature of work to be started.

As an additional measure to the implementation of the Quality Control Plan, the Contractor shall meet with representatives of the Contracting Officer as soon as practicable after receipt of Notice to Proceed and before start of construction or dredging to discuss the Contractor's quality control system. The meeting shall develop a mutual understanding relative to details of his Quality Control Program including the forms for recording the quality control operations; control activities, testing, administration of the system for both onsite and offsite, and the interrelationship of Contractor and

Government control and surveillance. Minutes of the meeting shall be prepared, signed by both the Contractor and the Contracting Officer or his authorized representative and shall become a part of the contract file. There may also be occasions when subsequent conferences will be called to reconfirm understandings.

7.2.1 Notification of Changes: After approval of the Quality Control Plan, the Contractor shall notify the Contracting Officer or his authorized representative in writing of any proposed change.

7.2.2 Work Deficiencies: The Contractor shall not build upon or conceal any work containing uncorrected defects. If deficiencies indicate that the Contractor's quality control system is not adequate or does not produce the desired results, corrective actions in both the quality control system and the work shall be taken by the Contractor. If the Contractor does not promptly make the necessary corrections, the Contracting Officer may issue an order stopping all or any part of the work until satisfactory corrective action has been taken. Payment for deficient work will be withheld until work as been satisfactorily corrected or other action is taken pursuant to the Special Contract Requirement INSPECTION OF CONSTRUCTION.

If the above does not obtain effective improvement in the Contractor's quality control system, the Contracting Officer or his authorized representative may direct changes be made in the quality control system and/or organization, including but not limited to the removal and replacement of unsatisfactory quality control representatives at any level or the addition of quality control personnel or services. Any additional cost to the Government for providing quality control services that are not satisfactorily performed by the Contractor, will be deducted from payment due the Contractor.

If recurring deficiencies in an item or items indicate that the quality control system is not adequate, such corrective actions shall be taken as directed by the Contracting Officer or his authorized representative.

7.3 Quality Control Organization:

7.3.1 System Manager: The Contractor shall identify an individual within his organization at the site of the work, who shall be responsible for overall management and have the authority to act in all Contractor quality control matters for the Contractor.

7.3.2 Personnel: A staff shall be maintained under the direction of the system manager to perform all quality control activities. The actual strength of the staff during any specific work period may vary to cover work phase needs, shifts, and rates of dredging. At least one full-time Contractor quality control person fully alert and awake shall be present on the disposal area at all times pumping operations are in progress. The personnel of this staff shall be fully qualified by experience and technically trained to perform their assigned responsibilities.

7.4 Control: The Contractor's quality control system shall include at least the following three phases of control and management for definable features of work:

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(a) Preparatory: Twenty-four hours in advance of beginning any definable features of work, the Contractor's quality control manager shall review with the Government inspector(s) the applicable provisions of the specifications and Quality Control Plan and confirm the methods to assure compliance.

(b) Initial: This phase of control must be accomplished at the time of arrival of disposal area and dredging personnel on site to accomplish a definable feature of work and at any time new workmen or crews arrive for assignment to the work. The Contractor's control system must permit the transfer of information on quality requirements specified in this contract to each workman before he starts, demonstration from each workman that he can provide the specified quality of work, and motivate him to continue. It is also during this phase that control testing to prove the adequacy of the Contractor's control procedures shall be initiated and verified. The Contracting Officer or his authorized representative shall be notified at least 24 hours in advance of each initial activity.

(c) Follow-up: The follow-up phase shall be performed continuously to verify that control procedures are providing an end product which complied with contract requirements. Adjustments to control procedures may be required based upon the results of this phase and compliance inspections.

7.5 Completion: At the completion of the work, the Contractor's quality control representative shall conduct a joint completion review with the Government inspector(s). During this review the work shall be examined, quality control shall be reviewed, and a list shall be developed of work not properly completed or not conforming to plans and specifications. This list shall be included in the quality control documentation with an estimated date for correction of each deficiency. The Contractor shall make sure that deficiencies have been corrected prior to the specified completion date. Payment will be withheld for defective or deficient features until they are satisfactorily corrected except as otherwise provided in the Special Contract Requirement INSPECTION OF CONSTRUCTION.

7.6 Quality Control Records:

7.6.1 The Contractor shall maintain current records, on an appropriate approved form, of quality control operations, activities, and tests performed including the work of suppliers and subcontractors. These records shall include factual evidence that the required activities or tests have been performed, including but not limited to the following:

- (a) Type and number of control activities and compliance inspections.
- (b) Results of control activities or inspections.
- (c) Nature of defects, causes for rejection, etc.
- (d) Proposed remedial action.
- (e) Corrective actions taken.

7.6.2 These records shall cover both conforming and defective or deficient features and shall include a statement that supplies and materials

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incorporated in the work comply with the contract. The Contractor shall submit legible, daily quality control reports to the Government inspector on the day following the report period. The records shall cover development of the disposal area(s), related piping, and dredging performed during the time period for which the records are furnished. These records shall be verified by person so designated by the Contractor. Failure to follow these procedures will be considered a breach of the Quality Control Program and portions of the progress payment may be withheld until it is demonstrated by the Contractor that the construction activities covered by the delinquent reports meet the requirements of the plans and specifications.

7.7 Measurement and Payment: No separate measurement and payment will be made for the work performed in Contractor Quality Control, specified herein, and all costs in connection therewith shall be considered a subsidiary obligation of the Contractor, and shall be included in the overall cost of the work.

8. EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (EFARS 52.0231.5000 (OCT 1995))

(a) This clause does not apply to terminations. See 52.249-5000, Basis for settlement of proposals and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable conditions owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual costs data for each piece of equipment or groups of similar serial and services for which the government can determine both ownership and operating costs from the Contractor's accounting records. When both ownership and operating costs can not be determined for any piece of equipment or groups of similar serial or series equipment from the Contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8 Construction Equipment Ownership and Operating Expenses Schedule, Region East. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d) (ii) and Far 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established proactive of leasing the same or similar equipment to unaffiliated leasees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the Contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet. CENAB-CT/SEP 95 (EFARS 52.231-5000)

9. SAFETY:

9.1 General: The Contractor shall comply with the Contract Clause ACCIDENT PREVENTION. EM 385-1-1, September 1996, subject: Safety and Health Requirements Manual, is a part of these specifications.

9.2 Accident Prevention Program: Within 7 calendar days after receipt of Notice to Proceed the Contractor shall furnish his Accident Prevention Program and three copies thereof to the Contracting Officer or his authorized representative for review and approval. The program shall be prepared in the following format:

(a) Administrative Plan

(b) Job Hazard Analysis

(c) A copy of company policy statement of accident prevention and any other guidance statements normally provided new employees.

(d) When marine plant and equipment are in use the Contractor shall assure that oil transfer operations to or from his plant comply with all Federal, State, county, and Municipal laws, codes and regulations. Particular attention is directed to 33 CFR Subchapter 0, POLLUTION. The Contractor shall incorporate in his accident prevention program, submitted in compliance with Contract Clause ACCIDENT PREVENTION, sufficient information to demonstrate that all fuel transfers will be made in accordance with 33 CFR 156 and any other applicable laws, codes and regulations. (CENABEN 1984 APR)

(e) The Contractor shall not commence physical work at the project site until the program has been approved by the Contracting Officer or his authorized representative. As an additional measure to implementation of the Accident Prevention Program, the Contractor shall meet with representatives of the Contracting Officer as soon as practicable after receipt of Notice to Proceed and before start of work to discuss and develop a mutual understanding relative to administration of the overall safety program. Minutes of the meeting shall be prepared, signed by the Contractor and the Contracting Officer or his authorized representative. At the Contracting Officer's discretion, the Contractor may submit his Job Hazard Analysis only for the phases of construction. All remaining phases shall be submitted and accepted prior to the beginning of work in each phase. EM 385-1-1, Section 1.

9.3 Accident Investigation and Reporting: Accidents shall be investigated by immediate supervisor of the employee(s) involved and reported to the Contracting Officer or the Government inspector within one working day after the accident. Paragraph 01.D, EM 385-1-1.

(a) The Contractor shall insure that all accidents which involve loss of life, occupational disease of the employee, injury incapacitating any person for normal work beyond the day of injury, or damage to property, materials, supplies, or equipment, of \$1,000.00 or more, and which relate to the dredge, any attendant plant, the dredge working area, or the placement

site, shall be recorded, investigated, and reported to the Contracting Officer or his authorized representative.

(b) Each accident shall be verbally reported to the Government inspector at the earliest practicable time, but within 24 hours. Each accident involving loss of life or traumatic injury to any person shall be reported to the Government inspector verbally, telephonically, or by radio immediately.

(c) The Contractor shall promptly investigate each accident and submit a written, signed report on ENG Form 3394 to the Government inspector within 48 hours.

(d) A factual record of each accident shall be entered in the Contractor's official daily log book.

9.4 Daily Inspections: The Contractor shall institute a daily inspection program to assure all safety requirements are being fulfilled. Reports of daily inspections shall be maintained in the Contractor's official daily log book. The reports shall be records of the daily inspections and resulting actions. Each report shall include, as a minimum, the following:

(a) Phase(s) of construction underway during the inspection.

(b) Locations of areas inspections were made.

(c) Results of inspection, including nature of deficiencies observed and corrective actions taken, or to be taken, date, and signature of the person responsible for its contents.

9.5 Means of Escape for Personnel Quartered or Working on Floating Plant: Two means of escape shall be provided for assembly, sleeping, and messing areas on floating plants. For areas involving 10 or more persons, both means of egress shall be through standard size doors opening to different exit routes. Where 9 or fewer persons are involved, one of the means of escape may be a window (minimum dimensions 24-inch by 36-inch) which leads to a different exit route. EM 385-1-1, Section 19.

9.6 Emergency Alarms and Signals:

9.6.1 Alarms. Emergency alarms shall be installed and maintained on all floating plant requiring a crew where it is possible for either a passenger or crewman to be out of sight or hearing from any other person. The alarm system shall be operated from the primary electrical system with standby batteries on trickle charge that will automatically furnish the required energy during an electrical-system failure.

9.6.2 Signals:

(a) Fire Alarm Signals: The general fire alarm signal shall be in accordance with paragraph 97.13-15b of the Coast Guard Rules and Regulations for Cargo and Miscellaneous Vessels, Subchapter I, 1 Sep 77 (CG 257)

(b) Abandon Ship Signals: The signal for abandon ship shall be in accordance with paragraph 97.13-15c of referenced cited in (a) above.

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(c) Man-Overboard Signal: Hail and pass the word to the bridge. All personnel and vessels capable of rendering assistance shall respond.

9.7 Mooring Lines: Eye loops on mooring lines shall be equipped with brackets or handling ropes to protect the hands of deckhands.

10. FUEL USAGE: The Contractor shall furnish the Contracting Officer a report, to be received on or before the last day of the calendar month, listing the totals of fuels consumed by the dredging plant and supporting vessels. The report shall list the quantities of different fuels separately. The report shall cover the period from the 25th of the preceding month to the 25th of the current month. This information may be included in the Contractor's Daily Report of Operations.

11. ENVIRONMENTAL LITIGATION: (1974 NOV OCE)

(a) If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of this contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the Contract Clause SUSPENSION OF WORK. The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

(b) The term "environmental litigation", as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment.

12. WORK ON SUNDAYS, HOLIDAYS AND AT NIGHT: When the Contractor elects to work on Sundays, holidays, or nights, notice of his intention to do so shall be given to the Contracting Officer within a reasonable time in advance thereof. Unless authorized by the Contracting Officer, no placement of material shall occur at night, without at least three (3) of the buoys lighted.

13. RADIO COMMUNICATIONS: At all times pumping operations are in progress, the Contractor is responsible and required to provide any and all equipment necessary to maintain 24-hour oral communication between the dredge operator, Quality Control System Manager, and the Corps of Engineers' inspector on site. For this purpose, the Contractor shall provide and maintain at his expense a marine band walkie-talkie radio for use by the Government inspector(s). The Contractor is responsible for any and all circumstances not conforming to the plans and specifications resulting from the inadequate operation of the equipment.

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14. PROGRESS SCHEDULING AND REPORTING: (JUN 1975) In accordance with the Contract Clauses, the Contractor, shall within 5 days or as otherwise determined by the Contracting Officer, after date of commencement of work, submit for approval a practicable progress schedule showing the manner in which he intends to prosecute the work. ENG Form 2454 ("Construction Progress Chart") will be furnished upon request for use in preparing this schedule. If a Contractor form is used, the same information as shown in the ENG Form 2454 shall be provided. Preparation and updating of the schedule shall be as follows:

14.1 Preparation: The progress schedule shall be prepared in the form of time-scaled summary network diagram graphically indicating the sequence proposed to accomplish each work activity or operation, and appropriate interdependencies between the various activities. The chart shall show the starting and completion dates of all activities on a linear horizontal time scale beginning with the dates of Notice to Proceed and indicating calendar days to completion. Each activity in the construction shall be represented by an arrow and shall have a beginning and ending node (event). The entire project shall have only one beginning node and one ending node. The arrangement of arrows shall be such that they flow from the left to right. Each arrow representing an activity shall be annotated to show the activity description, duration and cost. The Contractor shall indicate on the chart the important work activities that are critical to the timely overall completion of the project. Key dates for important features or portions of work features are milestone dates and shall be so indicated on the chart. Based on this chart, the Contractor shall prepare an earnings-time curve (S Curve) showing the rate of progress in terms of money and percent completion. Schedule progress may not include the value of materials or equipment delivered to the job site but not yet incorporated into the work. This schedule shall be the medium through which the timeliness of the Contractor's construction effort is appraised.

14.2 Updating: The Contractor shall update the schedule by entering actual progress thereon at monthly intervals. The status of activities completed or partially completed as of the end of each period shall be shown, as well as the percentage of work completed. In computing actual progress, the value of material and equipment on site but not incorporated into the work may not be considered. When changes are authorized that result in contract time extensions, the Contractor shall submit a modified chart for approval by the Contracting Officer. The Contract Clause SCHEDULES FOR CONSTRUCTION CONTRACTS with reference to overtime, extra shifts, etc., may be invoked when the Contractor fails to start or complete work activities or portions of same by the date indicated on the approved progress chart, or when it is apparent to the Contracting Officer from the Contractor's actual progress that these dates will not be met. (CENABCO-E)

15. CONTINUITY OF WORK: No payment will be made for work done in any area designated by the Contracting Officer until the full depth required under the contract is secured in the whole of such area, unless prevented by ledge rock, nor will payment be made for excavation in any area not adjacent to and in prolongation of areas where full depth has been secured except by decision of the contracting officer. Should any such nonadjacent area be excavated to full depth during the operations carried on under the contract, payment for all work therein may be deferred until the required depth has been made in the area intervening. The Contractor may be required to suspend

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dredging at any time when for any reason the gages or ranges cannot be seen or properly followed.

16. MISPLACED MATERIAL: Should the Contractor during the progress of the work, lose, dump, throw overboard, sink, or misplace any material, plant machinery, or appliance, which in the opinion of the Contracting Officer may be dangerous to or obstruct navigation, the Contractor shall recover and remove the same with the utmost dispatch. The Contractor shall give immediate notice, with description and location of such obstructions, to the Contracting Officer or inspector, and when required shall mark or buoy such obstructions until the same are removed. Should he refuse, neglect, or delay compliance with the above requirements, such obstructions may be removed by the Contracting Officer, and the cost of such removal may be deducted from any money due or to become due to the Contractor, or may be recovered under his bond. The liability of the Contractor of the removal of a vessel wrecked or sunk without fault or negligence shall be limited to that provided in Section 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 410 et seq.).

17. INSPECTION: The Government inspector(s) will direct the maintenance of the gauges, ranges, location marks and limit marks in proper order and position; but the presence of the Government inspector(s) shall not relieve the Contractor of responsibility for the proper execution of the work in accordance with the specifications. The Contractor shall be required:

(a) To furnish, on the request of the Contracting Officer, any Government inspector, or authorized representative, the use of such boats, boatmen, laborers, and material forming a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting and supervising the work. However, the Contractor will not be required to furnish such facilities for the surveys prescribed in the Special Clause FINAL EXAMINATION AND ACCEPTANCE.

(b) To furnish, on the request of the Contracting Officer, any Government inspector, or authorized representative, suitable transportation from all points on shore designated by the Contracting Officer to and from the various pieces of plant, and to and from the placement site.

(c) Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer, and the cost thereof will be deducted from any amounts due or to become due the Contractor.

18. FINAL EXAMINATION AND ACCEPTANCE:

(a) As soon as practicable after the completion of the entire work or any section thereof (if the work is divided into sections) as in the opinion of the Contracting Officer or his authorized representative will not be subject to damage by further operations under the contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer or his authorized representative. Should any shoals, lumps, or other lack of contract depth be disclosed by this examination the Contractor shall be required to remove same by dragging the bottom or by dredging at the contract

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rate for dredging, but if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoal may be waived by the discretion of the Contracting Officer or his authorized representative. The Contractor or his authorized representative will be notified when soundings and/or sweepings are to be made, and will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two sounding or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping, the cost of such third and any subsequent sounding or sweeping operations will be charged against the Contractor at the rate of \$1,200.00 per day for each day in which the Government plant is engaged in sounding or sweeping and/ or is enroute to or from the site or held at or near the said site for such operations.

(b) Final acceptance of the whole or a part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

19. SHOALING:

19.1 If, before the contract is completed, shoaling occurs in any section previously accepted, including shoaling in the finished channel, because of the natural lowering of the side slopes, redredging at contract price, within the limit of available funds, may be done if agreeable to both the Contractor and the Contracting Officer.

19.2 If before dredging survey indicates shoaling in the channel immediately adjacent to the channel to be dredged, the Contractor shall be required to dredge the additional shoaling at the contract unit price if directed by the Contracting Officer.

20. ENVIRONMENTAL PROTECTION:

20.1 General: The Contractor shall furnish all labor, materials and equipment, to perform all work required for the prevention of environmental pollution during, and as the result of, construction/dredging operations under this contract except for those measures set forth in the technical Provisions of these specifications. For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; or affect other species of importance to man. The control of environmental pollution requires consideration of air, water, and land.

20.2 Applicable Regulations: The Contractor and his subcontractors in the performance of this contract, shall comply with all applicable Federal, State, and local laws and regulations concerning environmental pollution control and abatement in effect on the date of this solicitation, as well as the specific requirements stated elsewhere in the contract specifications.

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20.3 Notification: The Contracting Officer or his authorized representative will notify the Contractor of any noncompliance with the foregoing provisions and the action to be taken. The Contractor shall, after receipt of such notice, immediately take corrective action. If the Contractor fails or refuses to comply promptly, the Contracting Officer or his authorized representative may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of time lost due to any such stop order shall be made subject of a claim for extension of time or for excess costs or damages by the Contractor unless it is later determined that the Contractor was in compliance.

20.4 Subcontractors: Compliance with the provisions for environmental protection by subcontractors shall be the responsibility of the Contractor.

20.5 Protection of Water Resources: The Contractor shall not pollute streams, lakes or reservoirs with fuels, oils, bitumens, calcium chloride, acid construction wastes, or other harmful materials. All work under this contract shall be performed in such a manner that objectionable conditions will not be created in streams through or adjacent to the project area. The Contractor shall take special positive protective measures to prevent spillage of potential pollutant materials such as fuel, emulsion materials, chemicals etc., from storage containers or equipment into public waters. Such positive protective measures may include, but not limited to the following:

(a) A berm enclosure of sufficient capacity to contain such materials.

(b) Security measures to prevent acts of vandalism which could result in spillage of such materials (fences, guards, etc.).

(c) Storage of such materials in an area where the terrain would preclude leakage into public waters.

(d) Utilization of secure Government storage areas if the Contracting Officer indicates such space is available. No storage past immediate needs (2 days) without the consent of the Contracting Officer or his authorized representative.

20.6 Burning: Burning shall be in compliance with Federal, State, and local laws. The Contractor shall be responsible for obtaining all required burning permit approvals.

20.7 Dust Control: The Contractor shall maintain all work areas free from dust which would contribute to air pollution. Approved temporary methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment or similar methods will be permitted to control dust. Sprinkling, where used, must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs.

20.8 Protection of Land Resources:

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20.8.1 General: It is intended that land resources within the project boundaries and outside the limits of the permanent work performed under this contract be preserved in their present condition or be restored to a condition after completion of construction that will appear to be natural and not detract from the appearance of the project. Insofar as possible, the Contractor shall confine his construction activities to areas defined by the plans and specifications or to be cleared for other operations. The following additional requirements are intended to supplement and clarify the requirements of the CONTRACT CLAUSES.

20.8.2 Protection of Trees Retained:

(a) The Contractor shall be responsible for the protection of the tops, trunks, and roots of all existing trees that are to be retained on the site. Protection shall be maintained until all work in the vicinity has been completed and shall not be removed without the consent of the Contracting Officer or the authorized representative of the contracting officer. If the Contracting Officer or his authorized representative finds that the protective devices are insufficient, additional protection devices shall be installed.

(b) Heavy equipment, vehicular traffic, or stockpiling of any materials shall not be permitted within the drip line of trees to be retained.

(c) No toxic materials shall be stored within 100 feet from the drip line of trees to be retained.

(d) Except for areas shown on the contract drawings to be cleared, the Contractor shall not deface, injure, or destroy trees or shrubs, nor remove or cut them without special authority. Existing nearby trees shall not be used for anchorage unless specifically authorized by the Contracting Officer or his authorized representative. Where such special emergency use is permitted, the Contractor or his authorized representative shall first adequately protect the trunk with a sufficient thickness of burlap over which softwood cleats shall be tied.

(e) No protective devices, signs, utility boxes or other objects shall be nailed to trees to be retained on the site.

20.9 Restoration of Landscape Damage: Any tree or other landscape feature scarred or damaged by the Contractor's operations shall be restored as nearly as possible to its original condition at the Contractor's expense. The Contracting Officer or his authorized representative will decide what method of restoration shall be used and whether damaged trees shall be treated and healed or removed and disposed of. All scars made on trees, designated on the plans to remain, and all cuts for the removal of limbs larger than 1 inch in diameter shall be coated as soon as possible with an approved tree-wound dressing. All trimmings or pruning shall be performed in an approved manner by experienced workmen with saws or pruning shears. Tree trimming with axes will not be permitted. Where tree climbing is necessary, the use of climbing spurs will not be permitted. Trees that are to remain, either within or outside established clearing limits, that are subsequently damaged by the Contractor and are beyond saving in the opinion of the Contracting Officer or his authorized representative, shall be immediately

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removed and replaced with a nursery-grown tree of the same species. Replacement trees shall measure no less than 2 inches in diameter at 6 inches above the ground level.

20.10 Location of Storage and Service Facilities: The location on Government property of the Contractor's storage and service facilities, required temporarily in the performance of the work, shall be upon cleared portions of the jobsite or areas to be cleared. The preservation of the landscape shall be an imperative consideration in the selection of all sites.

20.11 Temporary Excavation and Embankments: If the Contractor proposes to construct temporary roads, embankments, or excavations for plant and/or work areas, he shall submit a plan for approval prior to scheduled start of such temporary work.

20.12 Waste Disposal: Disposal of any materials, wastes, effluents, trash, garbage, oil, grease, chemicals, etc., in areas adjacent to the work site shall not be permitted. If waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore the area to the condition of the adjacent undisturbed area. If necessary, contaminated ground shall be excavated, disposed of as directed by the Contracting Officer, replaced with suitable fill material, compacted and planted as required to reestablish vegetation.

20.13 Corrective Action: The Contractor shall, upon receipt of a notice in writing of any noncompliance with the foregoing provisions, take immediate corrective action. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs of damages by the Contractor unless it was later determined that the Contractor was in compliance.

20.14 Measurement and Payment: No separate measurement and payment will be made for the work performed in Environmental Protection, specified herein, and all costs in connection therewith shall be considered a subsidiary obligation of the Contractor and shall be included in the overall cost of the work.

21. SUBCONTRACTS: In accordance with Section 00100, Instructions, Conditions, and Notices to Bidders, NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY, the Contractor shall, within 10 working days following award of any construction subcontract by the Contractor or a Subcontractor, deliver to the Contracting Officer or his authorized representative a completed DD Form 1565.

22. CONTRACTOR'S RESPONSIBILITY: (ECI, APP.A) The Contractor shall be responsible that his employees strictly comply with all Federal, State, and municipal laws that may apply to operations under the contract; and it is understood and agreed that the Contractor assumes full responsibility for the safety of his employees, plant, and materials, and for any damage or injury done by or to them from any source or cause, except damage caused to the plant or equipment by acts of the Government, its officers, agents or employees, in which event such damages will be the responsibility of the Government in accordance with applicable Federal laws. For the purpose of

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this clause, the terms "officers, agents or employees" of the Government shall not include persons who are employed by the Contractor and whose services have been furnished to the Government pursuant to this or any other contract. (See also FAR 52.236-7 and FAR 52.236-13)

22.1 Responsibility For Contractor Plant and Government Property: The Government will not be responsible for the dredge and attendant plant, any Government property aboard the dredge and attendant plant, or any accidental damage thereto during the period of the contract. The Contractor shall release the Government and its officers and agents from all responsibility for damages to dock facilities, submerged and aerial crossings, bridges, moored vessels, or other damages ordinarily covered by fire and marine insurance. (See also FAR 52.236-9)

22.2 Warranty: The Contractor warrants to the Government the quiet and peaceable use of the aforesaid property, and in case of any disturbance, by suit or otherwise, will defend the same free of charge to the Government in or before the proper State or United States courts.

22.3 Delays: If the Contractor refuses or fails to make delivery of the property within the time specified or any extension thereof, as provided in specifications, or to maintain the property in serviceable condition and diligently and competently to conduct the specified operations, the Government may, by written notice terminate the right of the Contractor to proceed with delivery or with further performance under the contract or such parts or parts thereof affected by the contract or otherwise and the Contractor shall be liable to the Government for any excess cost occasioned thereby.

22.4 Disclaimer: The Contractor shall hold and save harmless the United States, its officers and employees, from all claims that may arise resulting from the Contractor's negligence in connection with the work to be performed under the contract, or from noncompliance by the Contractor with the provisions of the contract, contract drawings, and specifications and/or the instructions of the Contracting Officer or his authorized representative. (See also FAR 52.236-10)

END OF SECTION

SECTION 2 - TECHNICAL PROVISIONS

1. WORK COVERED BY CONTRACT PRICE:

1.1 Payment Item No. 0001: All costs connected with the mobilization and demobilization of the Contractor's dredging plant and equipment furnished for Coan River, Northumberland County, Virginia as defined below shall be included in the contract lump-sum price for Item No. 0001 as listed in the Unit Price Schedule.

1.1.1 Mobilization shall include all costs for operations accomplished prior to commencement of actual dredging operations, i.e. transfer of dredge, attendant plant, and equipment to site; initial installation of pipe, and disposal area preparation required; and any other work that is necessary in advance of the actual dredging operations.

1.1.2 Demobilization shall include general preparation for transfer of plant to its home base, removal of pipelines, disposal area cleanup, and transfer of plant to its home base.

1.2 Payment Item No. 0002: The contract price per cubic yard for new work dredging shall include the costs of removal, and disposal of all material as specified herein or as indicated on the contract drawings exclusive of mobilization and demobilization costs as defined in paragraphs 1.1, 1.1.1, and 1.1.2. Payment shall be made in accordance with Item No. 0002 "New Work Dredging - Coan River" of the Unit Price Schedule which shall be full compensation for the work performed.

2. ORDER OF WORK: The order of dredging shall commence at station 0+875 and proceed to station 0+000, unless otherwise approved by the Contracting Officer's Representative.

(a) The dredging consists of furnishing, delivering, and operating one cutterhead, hydraulic, pipeline dredge with attendant plant capable of performing new work dredging in Coan River, Northumberland County, Virginia. Dredged material shall be placed in the designated oyster bar creation site.

(b) The Contractor shall deliver the dredge and attendant plant ready for operation at the project site within 5 calendar days prior to the initiation of dredging. Upon arrival of the dredge and all attendant plant at the project site in Coan River, Northumberland County, Virginia, the Contracting Officer's appointed inspector(s) will inspect the plant to determine whether any deficiencies have occurred subsequent to the time the plant was brought into compliance pursuant to the preaward inspection. The Contractor will be notified of acceptance or rejection of the plant within 24 hours after delivery.

(c) Upon Contractor notification and at least 24 hours prior to the commencement of dredging operations the Contractor and Government inspector(s) shall conduct a joint inspection of the oyster bar creation site operations. No dredging will be permitted to begin until all deficiencies identified by the Government inspector(s) have been satisfactorily corrected by the Contractor.

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(d) No dredging shall be permitted unless the Contractor appointed quality control person is present at the placement area while pumping operations are in progress.

(e) The dredged material shall be deposited in the oyster bar creation site designated on the contract drawings.

3. PLANT: Plant and equipment employed on the work shall be in satisfactory operating condition and capable of safely and efficiently performing the work under exposed environmental conditions and as set forth in the specification and shall be subject to inspection by the Contracting Officer at all times. Pipeline for hydraulic machines shall be kept in good conditions at all times, any leaks or breaks along their length shall be promptly and properly repaired. No reduction in the capacity of the plant employed on the work shall be made except by written permission of the Contracting Officer. The measure of the "Capacity of Plant" shall be its actual performance on the work to which these specifications apply. All floating pipelines used as accessways shall be equipped with walkways and guardrail conforming to paragraph 19.B.05 of Corps of Engineers Manual EM 385-1-1.

4. CHARACTER OF MATERIALS: It is believed that the material to be removed will consist principally of sand, shell, clay, silt, mud, gravel, debris, trash and combinations thereof. Minor variations in the subsurface materials are to be expected and, if encountered, shall not be considered as being materially different within the purview of the Contract Clause DIFFERING SITE CONDITIONS. Bidders are expected to examine the site of the work, and decide for themselves the character of the materials. A copy of the sieve analyses and boring logs of the sediment samples taken from the proposed Federal channel in Coan River are located at the end of the specifications, along with a map showing the approximate sample locations.

5. PLACEMENT OF EXCAVATED MATERIAL:

5.1 The Contractor shall use the designated Government-furnished oyster bar creation site. Within 7 days after receipt of Notice to Proceed, the Contractor shall furnish his plan for the dredging and placement operations to the Contracting Officer for review and approval. This plan shall include a description of all proposed dredging, transporting, and rehandling equipment to be utilized in performance of the contract work, and shall also include placement area layout plans indicating the locations of the dredged material discharge pipeline. Dredging will not be permitted to commence until this plan is approved by the Contracting Officer or his authorized representative.

5.2 Misplaced Excavated Material: Any material that is deposited elsewhere than in places designated or approved by the Contracting Officer or his authorized representative will not be paid for and the Contractor may be required to remove such misplaced material and deposit it where directed at his expense. Misplaced excavated material may constitute a violation of applicable Federal, State, and Local statutes and the Contractor shall be liable for any civil and/or criminal penalties imposed by these statutes. A copy of the Commonwealth of Virginia, Water Protection Permit is included as part of these specifications.

6. GOVERNMENT FURNISHED PLACEMENT AREA:

6.1 The Contractor shall use the designated Government-furnished oyster bar creation site designated as "Oyster Bar Creation Site" on the contract drawings. The material shall be excavated by hydraulic dredge and discharged by pipeline vertically downward through a diffuser at the end of the discharge pipe. The Contractor is required to furnish the diffuser in accordance with the attached specification at the end of this section.

6.2 Marking the Placement Area: Before placing material in the placement site, the area shall be plainly marked by the Contractor with four (4) lighted, orange colored buoys to be placed and maintained by him at locations designated by the Contracting Officer and under permit from the U.S. Coast Guard. Unless authorized by the Contracting Officer, no placement of material shall occur at night, without at least three (3) of the buoys lighted.

6.3 The material excavated shall be transported, deposited, and retained in the area designated as "Oyster Bar Creation Site" on the contract drawings. The placement area is located within the Public Ground No. 78, Northumberland County. Material will be placed in the designated site and the bottom will be raised no more than 2 feet. When the area where the discharge pipe is located has reached the maximum 2-foot thickness, the discharge pipe must be relocated. The dredged material must be discharged beneath the water surface using a diffuser to help control mounding and lateral spread of the dredged material and erosion of the existing river bed. The diffuser shall be located in the water column such that it shall not induce scouring of the river bottom, nor allow dispersion of sediment outside of the placement site. If either of these conditions occur, then adjustments must be made to correct the situation. The Contractor shall use either diffuser design that is attached at the end of these specifications, or an equivalent design, as approved by the Contracting Officer's Representative. The Contractor must continually monitor the placement effort in order to insure that the thickness of the dredged material does not exceed 2 feet.

6.4 The Contractor must provide the actual GPS coordinates for the area where the dredged material is placed, within 1 week of the completion of the placement operations.

6.5 In the event any leaks occur in the dredge pipeline line, the Contractor shall immediately discontinue dredging operations until such leaks in the line, or breaks are remedied at the Contractor's expense. The Contractor shall also, at his expense, recover and remove any material misplaced by such leaks or breaks.

6.6 Restoration of Landscape Damage. Any tree, grassed area or other landscape scarred or damaged by the Contractor's equipment shall be restored as nearly as possible to its original condition at the Contractor's expense. The Contracting Officer shall determine the methods of restoration to be used.

7. NONCOMPLIANCE: The Contracting Officer or his authorized representative will notify the Contractor in writing of any noncompliance with the foregoing provisions. Such notice, when delivered to the Contractor

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or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. Within 24 hours after the receipt of such notice, the Contractor shall mail, or personally deliver to the Contracting Officer or his authorized representative, a complete proposal of the prompt correction of the noncompliance. The Contracting Officer or his authorized representative will review the proposal and return it to the Contractor approved, subject to such changes or conditions as he finds necessary to assure correction of noncompliance. Immediately upon receipt of such approval, the Contractor shall begin the corrective work and shall carry it to completion. If the Contractor fails or refuses to submit his proposal or to proceed with the corrective work, the Contracting Officer or his authorized representative may suspend all or any part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such suspension shall be made the subject of a claim for extension of time nor for excess costs or damages by the Contractor. If he so elects, the Contracting Officer or his authorized representative may cause the corrective work to be accomplished by others, in which event the cost thereof shall be chargeable against any monies otherwise due the Contractor from the Government.

8. INSPECTION:

8.1 Inspection: The work will be conducted under the general direction of the Contracting Officer and will be subject to inspection by his appointed inspector(s) to insure strict compliance with the specifications. The Government inspector(s) will direct the maintenance of the gages, ranges, location marks, and limit marks in proper order. Portable lighting shall be provided upon request of the Government inspector(s) for more detailed inspection of potential trouble areas.

8.1.1 The Government inspector(s) will direct suspension of operations at any unit of work where the Contractor upon request does not correct:

(a) A safety hazard which is so grave as to endanger life, limb, or property or cause serious damage to the work. This includes but is not limited to a failure on the part of the Contractor (1) to have a full-time quality control person present and fully alert and awake at the placement area at all times pumping operations are in progress or (2) provide and maintain the required marine band radio for use by Government inspector(s) at all times while pumping operations are in progress

9. OVERDEPTH AND SIDE SLOPES:

9.1 Overdepth: To cover inaccuracies of the dredging process, material actually removed from within the specific areas to be dredged to a depth of not more than 1-foot below the required depth will be estimated and paid for at the contract price.

9.2 Side slopes: Material actually removed, within limits approved by the Contracting Officer, to provide for final side slopes not flatter than 1 vertical on 3 horizontal, but not in excess of the amount originally lying above this limiting side slope will be estimated and paid for, whether dredged in original position or by dredging space below the pay slope plane at the bottom of the slope for upslope material capable of falling into the

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cut. In computing the limiting amount of sideslope dredging, an over-depth of 1-foot measured vertically will be used.

9.3 Excessive dredging: Material taken from beyond the limits as extended in the provisions of paragraphs 9.1 and 9.2 above will be deducted from the total amount dredged as excessive overdepth dredging, or excessive sideslope dredging for which payment will not be made. Nothing herein shall be construed to prevent payment for the removal of shoals performed in accordance with the applicable provisions of the Special Clauses FINAL EXAMINATION AND ACCEPTANCE or SHOALING.

10. MEASUREMENT AND PAYMENT:

10.1 Mobilization and Demobilization: Mobilization and demobilization shall include all costs in connection with the development and maintenance of the placement area including but not limited to: obtaining the necessary permits and approvals for the work specified in accordance with the Contract Clause PERMITS AND RESPONSIBILITIES; full reimbursement for the premiums actually paid for performance and payment bonds, moving the Contractor's dredging plant and equipment to the site; initial laying of pipelines; maintenance of the placement areas, and the removal of all dredging plant, equipment and pipelines from the site upon completion of the work. Payment shall be made in accordance with Item No. 0001, "Mobilization and Demobilization" of the Unit Price Schedule which shall be full compensation for the work performed.

10.2 Dredging: The total amount of material removed and to be paid for under the contract, will be measured by the cubic yard in place by computing the volume between the bottom surface shown by soundings of the last survey made before dredging and the bottom surface shown by the soundings of a survey made as soon as practicable after the entire work specified has been completed and included within the limits of the overdepth and side slopes described in the Technical Provision paragraph OVERDEPTH AND SIDE SLOPES less any deductions that may be required for misplaced material described in the Technical Provision paragraph MISPLACED MATERIAL. Payment shall be made in accordance with Item No. 0002, "New Work Dredging - Coan River" of the Unit Price Schedule which will be full compensation for the work performed.

10.3 The maps and/or drawings already prepared are believed to represent accurately conditions existing on the date shown on the contract drawing(s). Determination of quantities removed and the deductions made therefrom to determine quantities by place measurement to be paid in the area specified, after having once been made, will not be reopened except on evidence of collusion, fraud, or obvious error.

10.4 Monthly partial payments will be based on approximate quantities determined by soundings or sweepings taken behind the dredge and/or approximate quantities reported in the Daily Reports of Operations.

10.5 Should the Contractor in conjunction with work under this contract perform dredging for third parties adjacent to the specified area to be dredged, payment will be made by the Government only for material removed from the contract area within a vertical plane at the contract unit lines at the location work is performed for such third parties.

11. WORK IN THE VICINITY OF STRUCTURES AND UTILITY CROSSINGS:

11.1 The Contractor shall exercise caution when working in the vicinity of structures and utility crossings or adjacent to the channel or placement areas. Repair of any damage resulting from excessive or improper excavation in the bottom or side slopes of the channel shall be the responsibility of the Contractor. Where dredging to the required elevation might endanger any structure, the Contracting Officer or his authorized representative may reduce the required excavation in the vicinity of such structure.

11.2 The Contractor shall provide at least project channel dimensions over all utility crossings. The Contractor shall submit for approval by the Contracting Officer or his authorized representative a detailed plan of operation at each pipeline or utility crossing where construction surveys indicated project channel does not exist. The plan shall contain emergency measures to be taken in the event of an accident. The Contractor shall notify the owners of pipelines or utilities at least three calendar days prior to operating within 150 feet of a pipeline or utility. The Government will not be responsible for any damage to structure or utilities due to the Contractor's deviation from the approved plan.

11.3 Any unidentified pipelines or structures which may be found within the limits of work shall not be disturbed nor shall dredging or the placement of dredged material be performed at these locations unless, and until, approved by the Contracting Officer.

12. QUALITY CONTROL:

12.1 The Contractor shall establish a Quality Control system to assure compliance with contract requirements and shall maintain records of his quality control for all construction and dredging operations as required in the QUALITY CONTROL paragraphs in the Special Clauses.

END OF SECTION

ATTACHMENTS

DAILY QUALITY CONTROL REPORT

Contract No.: _____ Date: _____ Rpt. No.: _____

Project Title & Location:

Weather: Clear P. Cloudy Cloudy Rainfall in (% of workday)

Temperature during workday: High degrees F. Low degrees F.

1. WORK PERFORMED BY CONTRACTORS/SUBCONTRACTOR(S)

	No. of Workers	Crafts	Hrs	Description of Work

2. OPERATING EQUIPMENT DATA (Not hand tools)

Equipment	Date of arrival/ departure	Owned or Rented	Hours Used	Hours Idle	Hours of Rep./Main

3. WORK PERFORMED TODAY: (Indicate location and description of work performed by prime and/or subcontractors).

Rpt. No.

4. QUALITY CONTROL INSPECTIONS & RESULTS (Includes a description of preparatory, initial, and/or follow-up inspections or meetings; check of subcontractors work and materials delivered to site compared to submittals and/or specifications; comments on proper storage of materials; included comments on corrective actions to be taken):

5. QUALITY CONTROL TESTING AND RESULTS (Comment on tests and attach test reports):

6. DAILY SAFETY INSPECTIONS (Include comments on new hazards to be added to Hazard Analysis and corrective action of any safety issues):

7. REMARKS (Include conversations with or instructions from the Government representatives; delays of any kind that are impacting the job; conflicts in the contract documents; comments on change orders; environmental considerations; etc.):

8. CONTRACTOR'S VERIFICATION: I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

Contractor Quality Control Officer

[illegible]

SUBSURFACE EXPLORATION NOTES
COAN RIVER
LEWISSETTA, NORTHUMBERLAND COUNTY, VA
PHASES I & II

1. EXPLORATION WAS PERFORMED DURING AUGUST 1997 AND MARCH 2001.
2. ALL BORINGS WERE ACCOMPLISHED AS INDICATED USING EITHER A TRIPOD WITH CATHEAD OR A CME 45 SKID-RIG PLACED ON A BARGE.
3. DRILL HOLES (DH-1 THRU DH-6) WERE ACCOMPLISHED BY STANDARD PENETRATION TEST PROCEDURE (SPT) USING A 1-3/8" X 2'-8" LONG SPLIT SPOON. SAMPLE SPOONS WERE ADVANCED BY A 140# HAMMER FALLING 30". THESE HOLES WERE ADVANCED BETWEEN SAMPLING EVENTS BY DRIVING A 4" ID CASING WHILE JETTING WATER UNDER PRESSURE AT THE SAME TIME. BLOW COUNTS ARE FOR 0.5' OF DRIVE, UNLESS OTHERWISE INDICATED.

DRILL HOLES (DH-C1 THRU DH-C9) WERE ACCOMPLISHED BY STANDARD PENETRATION TEST PROCEDURE (SPT) USING A 1-3/8" X 2'-8" LONG SPLIT SPOON. SAMPLE SPOONS WERE ADVANCED BY A 140# HAMMER FALLING 30". THE RIVER SEDIMENTS WERE COLLECTED CONTINUOUSLY THROUGH THE CASING BY SPT METHOD. THESE HOLES WERE ADVANCED BETWEEN SAMPLING EVENTS BY DRIVING A 4" ID CASING WHILE JETTING WATER UNDER PRESSURE AT THE SAME TIME. BLOW COUNTS ARE FOR 0.5' OF DRIVE, UNLESS OTHERWISE INDICATED.

WH - DENOTES WEIGHT OF HAMMER

WR - DENOTES WEIGHT OF ROD

P - INDICATED LOCATION OF PRESSED SHELBY TUBE SAMPLE

4. BLOW COUNTS REQUIRED TO ADVANCE SAMPLE ARE SHOWN IN COLUMN (a).
5. COLUMN (b) SHOWS THE NATURAL WATER CONTENTS IN PERCENT OF DRY WEIGHT OF THOSE SAMPLES TESTED.
6. SOIL DESCRIPTIONS ARE SHOWN IN COLUMN (c).
7. SOIL DESCRIPTIONS ARE LABORATORY CLASSIFICATIONS BASED ON THE UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487/2488), EXCEPT THOSE INDICATED THUS (**), WHICH ARE FIELD INSPECTOR'S CLASSIFICATIONS.

THE ORGANIC TEST (ASTM D 2974, METHOD "C"; OR LOSS ON IGNITION TEST (LOI) (AASHTO-T-267) WAS USED TO EVALUATE AND DESCRIBE THE ORGANIC CONTENT OF SOILS FOR DESIGN AND CONSTRUCTION AS FOLLOWS:

<u>LOI</u>	<u>SOIL DESCRIPTION</u>
<12	INORGANIC
12 TO 24	ORGANIC
25 TO 60	VERY ORGANIC
>60	PEAT (Pt)

8. A SOUNDING OF THE COAN RIVER WAS PERFORMED USING A WEIGHTED MEASURING TAPE PRIOR TO SAMPLING. THE DEPTH OF WATER AT EACH DRILL SITE WAS MEASURED AND RECORDED. DEPTHS ARE REFERENCED TO MLLW.
9. ELEVATIONS SHOWN ON THE BORING LOGS ARE GROUND SURFACE ELEVATIONS AT THE TIME OF EXPLORATION. THEY WERE DETERMINED BY ESTIMATION FROM SPOT ELEVATIONS ON SURVEY MAPS.
10. POSITIONING FOR THE BORINGS DRILLED IN MARCH 2001 WAS OBTAINED USING EITHER A TRIMBLE DMS 212 GPS SYSTEM.
11. FOR LOCATIONS OF SUBSURFACE EXPLORATIONS, SEE BORING LOCATION PLAN.

DEPTH(ft)		(c)	(d)	(a)	(b)
1.5		Very moist, brown & lt. brown, poorly graded med. to fine SAND (SP)		WR/1-WH	
3.0		Wet, dk. brown, poorly graded SAND (SP)		L-1-1	
4.5		Very moist, brownish yellow, poorly graded med. to fine SAND (SP)		1-1-1	
7.5		Very moist, brownish yellow & black, poorly graded med. to fine SAND (SP)		5 WH/1-1	
9.0		Very moist, black & brownish yellow, poorly graded med. to fine SAND (SP)		WH/1.5	
10.5		Very moist, black & brownish yellow, poorly graded med. to fine SAND (SP)		WH/1-1	
		<p style="text-align: center;">BOTTOM OF HOLE</p> <p>Note: A sounding of the Coan River was performed using a weighted measuring tape prior to sampling. The depth of water at drill site DH-C7 was measured at 2.0' at 1630 hrs on 03/29/01. The approximate MLLW for this area is -6.0'.</p>			

DH-C7
GROUNDWATER DATA

WHILE DRILLING: *

ON COMPLETION:

Hr. READING:



Fill

 **Auger**

SPT

 RB

Cored

 **300 lb**

Tubex

**Hand**

Fish Tail


Vibra Core

Water Jet



1

DEPTH(ft)		(c)	(d)	(a)	(b)
1.5		Wet, very dk. gray, poorly graded SAND w/ silt and shell frags. and tr. of gravel (SP-SM)		1-1-1	
3.0		Wet, dk. reddish brown, poorly graded SAND w/ silt and shell frags. and tr. of gravel (SP-SM)		1-1.5	
		Wet, dk. grayish brown to brown, poorly graded SAND (SP)		1-1-1	
6.0			5	WH/1.5	
		BOTTOM OF HOLE			
		Note: A sounding of the Coan River was performed using a weighted measuring tape prior to sampling. The depth of water at drill site DH-C8 was measured at 8.0' at 1530 hrs on 03/29/01. The approximate MLLW for this area is -7.0'.			
			10		
			15		
			20		
			25		
			30		
			35		

DH-C8
GROUNDWATER DATA

WHILE DRILLING:

ON COMPLETION:

Hr. READING:

Fill

 Auger


 **SPT**

 RB

Cored

 300 lb **Tubex**

 Hand

 Fish Tail **Vibra Core**

 Water Jet

et













DEPTH(ft)		(c)	(d)	(a)	(b)
X	1.5	No Recovery		WH/1.5	
X	3.0	Wet, pale brown & yellow, silty coarse to fine SAND w/ tr. of gravel & shell (SM)		4-3-8	
X	4.5	Very moist, lt. gray & lt. yellowish brown, silty coarse to fine SAND w/ tr. of gravel & shell (SM)		2-3-2	
X	6.0	Moist, lt. gray to brownish yellow, silty coarse to fine SAND w/ tr. of gravel & shells (SM)		5	WH-1-2
		BOTTOM OF HOLE			
		<p>Note: A sounding of the Coan River was performed using a weighted measuring tape prior to sampling. The depth of water at drill site DH-C8 was measured at 7.0' at 1310 hrs on 03/29/01. The approximate MLLW for this area is -8.0'.</p>			
				10	
				15	
				20	
				25	
				30	
				35	

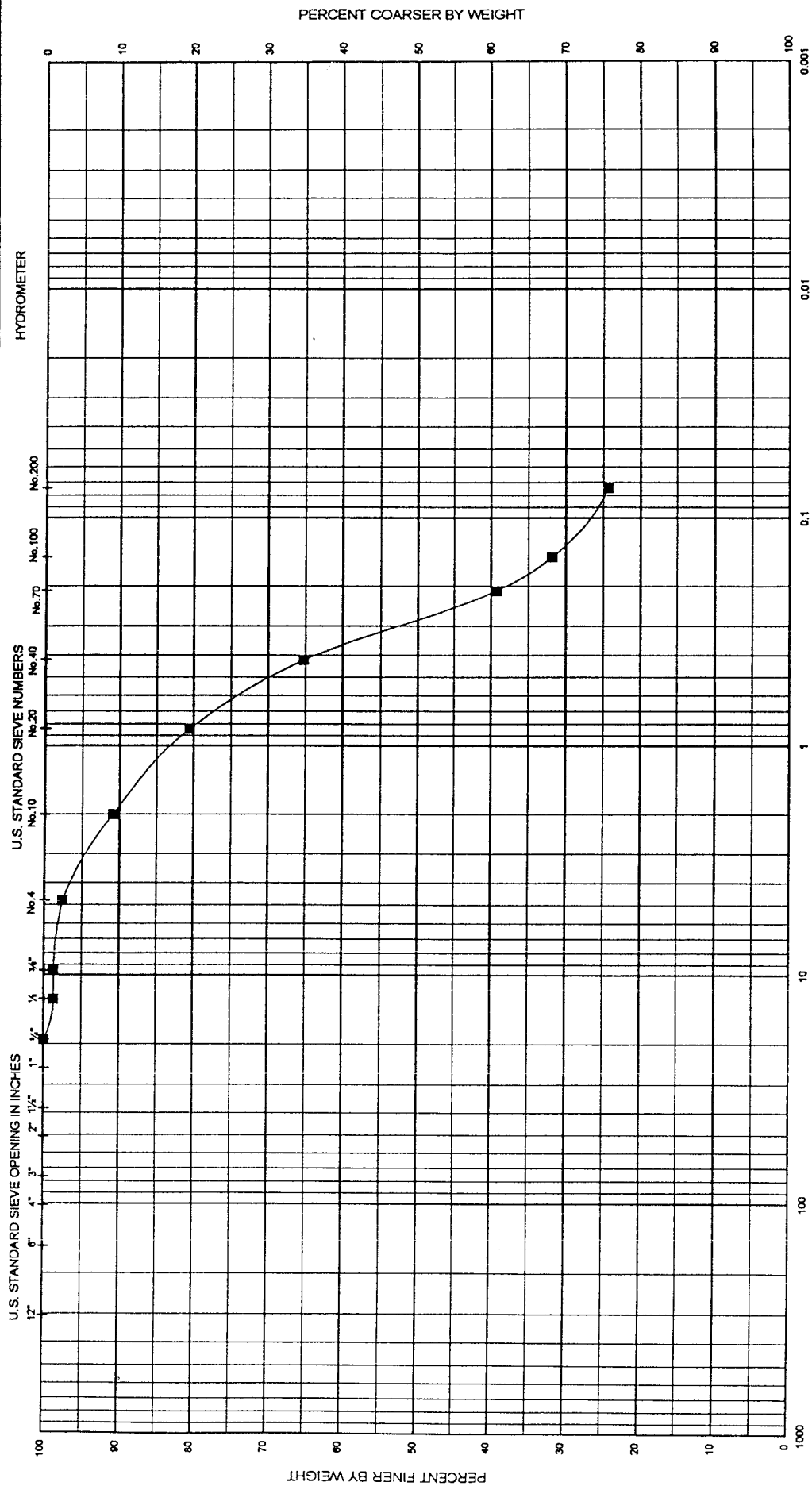
DH-C9
GROUNDWATER DATA

WHILE DRILLING: *

ON COMPLETION:

Hr. READING:

 **Fill**
  **Auger**
  **SPT**
  **RB**
 **Cored**
  **300 lb**
  **Tubex**
  **Hand**
 **Fish Tail**
  **Vibra Core**
  **Water Jet**
  **Blank**





COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

VWP Individual Permit Number: 01-1614
Effective Date: May 21, 2002
Expiration Date: May 21, 2012

VIRGINIA WATER PROTECTION PERMIT

ISSUED PURSUANT TO THE STATE WATER CONTROL LAW

AND SECTION 401 OF THE CLEAN WATER ACT

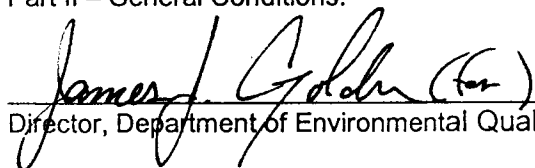
Based upon an examination of the information submitted by the owner and in compliance with Section 401 of the Clean Water Act as amended (33 USC 1251 et seq.) and the State Water Control Law and regulations adopted pursuant thereto, the Board has determined that there is a reasonable assurance that the activity authorized by this permit, if conducted in accordance with the conditions set forth herein, will protect instream beneficial uses and will not violate applicable water quality standards. The Board finds that the effect of the impact, together with other existing or proposed impacts to wetlands, will not cause or contribute to a significant impairment to state waters or fish and wildlife resources.

Permittee: U. S. Army Corps of Engineers
Address: Baltimore District
P. O. Box 1715
Baltimore, MD 21203-1715

Activity Location: The navigational dredging site is located 280 feet west of Walnut Point in the Coan River in Northumberland County, Virginia. The open water placement site is located in the Coan River at Public Ground (PG) 78.

Activity Description: The project will include the construction of a new navigational channel to the west of Walnut Point in the mouth of the Coan River. The dimensions of the new channel will be 1,000 feet long by 100 feet wide to a depth of -12 feet MLLW (to include allowable overdepth). The channel will be hydraulically dredged and the 10,000 cubic yards (92% sand, 3% silt, 2% gravel, and 3% clay) of dredged material will be placed on Public Ground 78 for oyster bar restoration purposes. The navigational dredging and open water placement project will result in no impact to vegetated or non-vegetated wetlands.

The permitted activity shall be in accordance with this Permit Cover Page, Part I – Special Conditions, and Part II – General Conditions.


Director, Department of Environmental Quality


Date

PART I - SPECIAL CONDITIONS

A. Authorized Activities

1. This permit authorizes the construction of a new U. S. Army Corps of Engineers navigational channel located to the west of Walnut Point in the mouth of the Coan River, to be dredged by hydraulic method, and placement at Public Ground (PG) 78 as indicated in the Joint Permit Application dated August 29, 2001, received on September 19, 2001 and supplemental information received on September 19, 2001, revisions received on March 14, 2002 and March 21, 2002, which was deemed complete on March 21, 2002.
2. The project activities, including any conditions and limitations, described in the Joint Permit Application and any supplemental materials submitted by the applicant, or authorized agent, shall be adhered to for the term of this permit.
3. The permittee shall notify the Department of Environmental Quality (DEQ) Piedmont Regional Office (PRO) of any additional impacts to State waters, including wetlands, associated with this project. Any additional impacts to State waters, including wetlands, shall be subject to individual permit review or modification of this permit, and compensatory mitigation will be required.
4. This permit is valid for **ten (10) years** from the date of issuance. Re-issuance of the permit may be necessary if any portion of the authorized activities or any permit requirement (including compensatory mitigation provisions) have not been completed. The permit term, including any extensions, cannot exceed the **maximum of fifteen (15) years**. The extension may be requested through written notification to the Department of Environmental Quality Piedmont Regional Office, provided that there are no changes in the authorized activities.
5. This permit does not satisfy the need to obtain a Virginia Pollutant Discharge Elimination System (VPDES) permit for outfall structures.

B. Standard Project Conditions:

1. The activities authorized by this permit shall be executed in a manner to minimize any adverse impact on stream beneficial uses, as defined in § 62.1-10(b) of the Code.
2. The permittee shall employ measures to prevent spills of fuels, lubricants, or other pollutants into State waters.
3. All dredging and/or filling in State waters shall be accomplished in a manner that minimizes stream bottom disturbances and turbidity increases.

4. No activity shall substantially disrupt the movement of aquatic life indigenous to the water body, including those species that normally migrate through the area, unless the primary purpose of the activity is to impound water. Culverts placed in streams must be installed to maintain low flow conditions. No activity may cause more than minimal adverse effect on navigation. Furthermore the activity must not impede the passage of normal or expected high flows and the structure or discharge must withstand expected high flows. Flows downstream of the project area shall be maintained to protect all uses.
5. Modification of this permit may be required for activities involving the construction of instream impoundments, stream modifications, dredging, or water withdrawals where DEQ determines, upon consultation with the Virginia Department of Game & Inland Fisheries, that time-of-year restrictions are appropriate in State waters critical to the movement and reproduction of anadromous fish.
6. All construction, construction access (for example, cofferdams, sheetpiling, and causeways) and demolition activities associated with this project shall be accomplished in a manner that minimizes construction or waste materials from entering surface waters to the maximum extent practicable, unless authorized by this permit.
7. Immediately downstream of the project area, water quality standards shall not be violated as a result of the construction activities.
8. Erosion and sedimentation controls shall be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992. These controls shall be placed prior to clearing and grading and maintained in good working order to minimize impacts to state waters. These controls shall remain in place until the area stabilizes.
9. Any exposed slopes or streambanks must be stabilized immediately upon completion of the project at each water body. All denuded areas shall be properly stabilized in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.
10. Untreated stormwater runoff shall be prohibited from directly discharging into any surface waters. Appropriate best management practices (BMP) shall be deemed suitable treatment prior to discharge into state waters.
11. No machinery may enter flowing waters, unless authorized by this permit.
12. All fill material shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations.
13. Continuous flow of perennial springs shall be maintained by the installation of spring boxes, french drains, or other similar structures.
14. Wet or uncured concrete shall be prohibited from entry into flowing surface waters.

15. In issuing this permit, the Board has not taken into consideration the structural stability of any proposed structure(s).

C. Construction Monitoring

1. Photo stations shall be established to document the construction activities within impact areas authorized by this permit. Photographs shall be taken to document the activities during construction.
2. The permittee shall make provisions to monitor for any spills of petroleum products or other materials during the construction process. These provisions shall be sufficient to detect and contain any spill and notify the appropriate authorities.

D. Required Notifications and Submittals

1. All written communications required by this permit shall be submitted to the Department of Environmental Quality, Piedmont Regional Office, 4949-A Cox Road, Glen Allen, Va. 23060. Please include the permit number on all correspondence.
2. Properly labeled photographs shall include the following information: date and time of the photograph, name and signature of the person taking the photograph, photograph orientation, permit number, and identifying name/description of the photograph.
3. The DEQ-PRO Virginia Water Protection Program shall be notified in writing by certified mail to Department of Environmental Quality, Piedmont Regional Office, 4949-A Cox Road, Glen Allen, Va. 23060 at least ten (10) days prior to the start of activities authorized under this permit so that inspections of the project can be planned, if deemed necessary. The notification shall include identification of the impact area and compensation site (if applicable) at which work will occur and a projected schedule for completing work at each permitted impact area and compensation site (if applicable).
4. The DEQ-PRO Virginia Water Protection Program shall be notified in writing by certified mail within thirty (30) days following the completion of all activities in permitted impact areas authorized under this permit.
5. The permittee shall report any fish kills or spills of fuels or oils immediately upon discovery. If spills or fish kills occur between the hours of 8:15 AM to 5:00 PM Monday through Friday, DEQ shall be notified at (804) 527-5020; otherwise, the Department of Emergency Services shall be notified at 1-800-468-8892.
6. Violations of State water quality standards shall be reported within twenty-four (24) hours to the DEQ at (804) 527-5020.
7. The permittee shall notify the DEQ-PRO in writing when potential environmentally threatening conditions are encountered which require debris removal or involve potentially toxic substances. Measures to remove the obstruction, material, or toxic

substance or to change the location of any structure are prohibited until approved by the DEQ.

8. A quarterly construction monitoring report shall be submitted to the DEQ-PRO by January 10, April 10, July 10, and October 10 documenting progress of construction activities authorized by this permit. The reports shall include, at a minimum, the following:
 - a. A written narrative stating whether work was performed, when work started in the identified impact area, where work was performed, what work was performed, and what work was completed during the quarter.
 - b. Properly labeled photographs (to include date and time, name and signature of the person taking the photograph, and permit number) showing representative construction activities including, but not limited to, dredging, open water placement, etc.
9. All reports required by this permit and other information requested by the DEQ shall be signed by the applicant or a person acting in the applicant's behalf, with the authority to bind the applicant. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above; and
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
 - c. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Board prior to or together with any separate information, or applications to be signed by an authorized representative.
10. All submittals required by this permit shall contain the following signed certification statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

E. Dredging and Disposal

1. The maximum depth of the access channel shall not be deeper than the controlling water depths immediately outside the area to be dredged.
2. Dredging shall be accomplished to minimize disturbance of the bottom and minimize turbidity levels in the water column.
3. The double handling of dredged material in State Waters shall not be permitted.
4. Dredging shall be accomplished by hydraulic method using a pipeline to transport the dredged material from the cutterhead to the placement site and shall be done in such a manner as to prevent leakage or discharge into State waters until offloading occurs at Public Ground (PG) 78. In the event of a ruptured pipeline, dredging/disposal operations shall immediately cease until repairs are accomplished.
5. Side slope cuts of the dredging area shall not exceed a two horizontal to one vertical (2:1) slope to prevent slumping of material into the dredged area.
6. The proposed entrance channel bottom width dredge cut shall not exceed one hundred (100) feet in width. The maximum channel length shall be no greater than 1,000 linear feet.
7. Dredging is allowed to a maximum of -12 feet Mean Lower Low Water (MLLW) (to include allowable overdepth).
8. The dredging cycle shall remove no more than 10,000 cubic yards of material over the life of this permit.
9. Dredging shall be prohibited each year during the period June 1 through September 30 and December 1 through March 15, inclusive.
10. No hazardous materials shall be disposed of at this site.
11. For navigation channels the following shall apply:
 - a. A minimum of 15 feet shall be maintained between the top of the dredge cut and the toe of the bank.
 - b. A buffer of four times the depth of the dredge cut shall be maintained between the top of the dredge cut and the channelward limit of wetlands or mean low water.
12. A post-dredging bathymetric survey shall be submitted to DEQ within 30 days following completion of the dredging activity.

Part II – General Conditions

A. Duty to comply

The permittee shall comply with all conditions of the VWP permit. Nothing in the VWP permit regulations shall be construed to relieve the permittee of the duty to comply with all applicable federal and state statutes, regulations and prohibitions. Any VWP permit violation is a violation of the law, and is grounds for enforcement action, VWP permit termination, revocation, modification, or denial of an application for a VWP permit extension or reissuance.

B. Duty to Cease or Confine Activity

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which a VWP permit has been granted in order to maintain compliance with the conditions of the VWP permit.

C. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any impacts in violation of the permit which may have a reasonable likelihood of adversely affecting human health or the environment.

D. VWP Permit Action

1. A VWP permit may be modified, revoked and reissued, or terminated as set forth in 9 VAC 25-210 et seq.
2. If a permittee files a request for VWP permit modification, revocation, or termination, or files a notification of planned changes, or anticipated noncompliance, the VWP permit terms and conditions shall remain effective until the request is acted upon by the board. This provision shall not be used to extend the expiration date of the effective VWP permit. If the permittee wishes to continue an activity regulated by the VWP permit after the expiration date of the VWP permit, the permittee must apply for and obtain a new VWP permit or comply with the provisions of 9 VAC 25-210-185 (VWP Permit Extension).
3. VWP permits may be modified, revoked and reissued or terminated upon the request of the permittee or other person at the board's discretion, or upon board initiative to reflect the requirements of any changes in the statutes or regulations, or as a result of VWP permit noncompliance as indicated in the Duty to Comply subsection above, or for other reasons listed in 9 VAC 25-210-180 (Rules for Modification, Revocation and Reissuance, and Termination of VWP permits.).

E. Inspection and Entry

Upon presentation of credentials, any duly authorized agent of the board may, at reasonable times and under reasonable circumstances:

Part II – General Conditions

Page 2 of 6

1. Enter upon any permittee's property, public or private, and have access to, inspect and copy any records that must be kept as part of the VWP permit conditions;
2. Inspect any facilities, operations or practices (including monitoring and control equipment) regulated or required under the VWP permit, and
3. Sample or monitor any substance, parameter or activity for the purpose of ensuring compliance with the conditions of the VWP permit or as otherwise authorized by law.

F. Duty to Provide Information

1. The permittee shall furnish to the board any information which the board may request to determine whether cause exists for modifying, revoking, reissuing or terminating the VWP permit, or to determine compliance with the VWP permit. The permittee shall also furnish to the board, upon request, copies of records required to be kept by the permittee.
2. Plans, specifications, maps, conceptual reports and other relevant information shall be submitted as required by the board prior to commencing construction.

G. Monitoring and Records Requirements

1. Monitoring of parameters, other than pollutants, shall be conducted according to approved analytical methods as specified in the VWP permit. Analysis of pollutants will be conducted according to 40 CFR Part 136 (2000), Guidelines Establishing Test Procedures for the Analysis of Pollutants.
2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
3. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the VWP permit, and records of all data used to complete the application for the VWP permit, for a period of at least three years from the date of the expiration of a granted VWP permit. This period may be extended by request of the board at any time.
4. Records of monitoring information shall include:
 - a. The date, exact place and time of sampling or measurements;
 - b. The name of the individuals who performed the sampling or measurements;
 - c. The date and time the analyses were performed;
 - d. The name of the individuals who performed the analyses;
 - e. The analytical techniques or methods supporting the information such as observations, readings, calculations and bench data used;

- f. The results of such analyses; and
- g. Chain of custody documentation.

H. Transferability

This VWP permit may be transferred to a new permittee only by modification to reflect the transfer, by revoking and reissuing the permit, or by automatic transfer. Automatic transfer to a new permittee shall occur if:

1. The current permittee notifies the board within 30 days of the proposed transfer of the title to the facility or property;
2. The notice to the board includes a written agreement between the existing and proposed permittee containing a specific date of transfer of VWP permit responsibility, coverage and liability to the new permittee, or that the existing permittee will retain such responsibility, coverage, or liability, including liability for compliance with the requirements of any enforcement activities related to the permitted activity; and
3. The board does not within the 30-day time period notify the existing permittee and the new permittee of its intent to modify or revoke and reissue the VWP permit.

I. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize injury to private property or any invasion of personal rights or any infringement of federal, state or local law or regulation.

J. Reopener

This permit may be reopened to modify conditions to meet new regulatory standards duly adopted by the board. Cause for reopening VWP permits includes, but is not limited to when the circumstances on which the previous VWP permit was based have materially and substantially changed, or special studies conducted by the board or the permittee show material and substantial change, since the time the VWP permit was issued and thereby constitute cause for VWP permit modification or revocation and reissuance.

K. Compliance with State and Federal Law

Compliance with this VWP permit constitutes compliance with the VWP permit requirements of the State Water Control Law. Nothing in this VWP permit shall be construed to preclude the institution of any legal action under or relieve the permittee from any responsibilities, liabilities, or other penalties established pursuant to any other state law or regulation or under the authority preserved by § 510 of the Clean Water Act.

L. Severability

The provisions of this VWP permit authorization are severable.

M. Permit Modification

A VWP permit may be modified, but not revoked and reissued except when the permittee agrees or requests, when any of the following developments occur:

1. When additions or alterations have been made to the affected facility or activity which require the application of VWP permit conditions that differ from those of the existing VWP permit or are absent from it;
2. When new information becomes available about the operation or activity covered by the VWP permit which was not available at VWP permit issuance and would have justified the application of different VWP permit conditions at the time of VWP permit issuance;
3. When a change is made in the promulgated standards or regulations on which the VWP permit was based;
4. When it becomes necessary to change final dates in schedules due to circumstances over which the permittee has little or no control such as acts of God, materials shortages, etc. However, in no case may a compliance schedule be modified to extend beyond any applicable statutory deadline of the Act;
5. When changes occur which are subject to “reopener clauses” in the VWP permit; or
6. When the board determines that minimum instream flow levels resulting from the permittee’s withdrawal of water are detrimental to the instream beneficial use and the withdrawal of water should be subject to further net limitations or when an area is declared a Surface Water Management Area pursuant to §§ 62.1-242 through 62.1-253 of the Code of Virginia, during the term of the VWP permit.

N. Permit Termination

After notice and opportunity for a formal hearing pursuant to Procedural Rule No. 1 (9 VAC 25-230-100) a VWP permit can be terminated for cause. Causes for termination are as follows:

1. Noncompliance by the permittee with any condition of the VWP permit;
2. The permittee’s failure in the application or during the VWP permit issuance process to disclose fully all relevant facts or the permittee’s misrepresentation of any relevant facts at any time;
3. The permittee’s violation of a special or judicial order;

4. A determination by the board that the permitted activity endangers human health or the environment and can be regulated to acceptable levels by VWP permit modification or termination;
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP permit; and
6. A determination that the permitted activity has ceased and that the compensatory mitigation for unavoidable adverse impacts has been successfully completed.

O. Civil and Criminal Liability

Nothing in this VWP permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this VWP permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Unauthorized Discharge of Pollutants

Except in compliance with this VWP permit, it shall be unlawful for the permittee to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances;
2. Excavate in a wetland;
3. Otherwise alter the physical, chemical, or biological properties of state waters and make them detrimental to the public health, to animal or aquatic life, to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses.
4. On or after October 1, 2001 conduct the following activities in a wetland:
 - a. New activities to cause draining that significantly alters or degrades existing wetland acreage or functions;
 - b. Filling or dumping;
 - c. Permanent flooding or impounding; or
 - d. New activities that cause significant alteration or degradation of existing wetland acreage or functions.

R. VWP Permit Extension


Any permittee with an effective VWP permit for an activity that is expected to continue after the expiration date of the VWP permit, without any change in the activity authorized by the VWP permit, shall submit written notification requesting an extension. The permittee must file the request prior to the expiration date of the VWP permit. Under no circumstances will the extension be granted for more than 15 years beyond the original effective date of the VWP permit. If the request for extension is denied, the VWP permit will still expire on its original date and, therefore, care should be taken to allow for sufficient time for the board to evaluate the extension request and to process a full VWP permit modification, if required.

**VIRGINIA WATER PROTECTION INDIVIDUAL PERMIT ISSUANCE FACT
SHEET**

**Department of Environmental Quality – Water Division
Piedmont Regional Office
4949-A Cox Road, Glen Allen, VA 23060**

SUBJECT: Issuance of Virginia Water Protection Individual Permit Number 01-1614
U.S. Army Corps of Engineers, Baltimore District – Coan River
Navigational Dredging and Open Water Placement Project
Northumberland County, VA

TO: Curtis J. Linderman, P.E.
Water Permit Manager

FROM: Deborah G. Morgan 
Permit Writer

DATE: May 16, 2002

COPY: VWP permit file

DEQ has reviewed the application for the Virginia Water Protection (VWP) Individual Permit Number 01-1614 and has determined that the project qualifies as a VWP Category II project. Based on the information provided in the application and in compliance with § 401 of the Clean Water Act as amended (33 USC 1251 et seq.) and the State Water Control Law and regulations, DEQ has determined that there is a reasonable assurance that the activity authorized by this permit will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to significant impairment of state waters or fish and wildlife resources provided the permittee complies with all permit conditions.

Surface water impacts have been avoided and minimized to the maximum extent practicable. Permitted wetland impacts have been inventoried in evaluating this proposed permit.

The following details the application review process and summarizes relevant information for developing the Part I – Special Conditions for permit issuance.

VWP PERMITS PROGRAM FACT SHEET

Page 2

1. Contact Information: Mr. Wesley Coleman
U.S. Army Corps of Engineers
Baltimore District
P. O. Box 1715
Baltimore, MD 21203-1715

Permittee Legal Name and Address: Mr. Wesley Coleman
U.S. Army Corps of Engineers
Baltimore District
P. O. Box 1715
Baltimore, MD 21203-1715

2. Processing Dates:

Received Application: September 19, 2001, Supplemental information October 26, 2001, Revisions March 14, 2002 and March 21, 2002
Application Complete: March 21, 2002
Permit Fee Received by Accounting: Exempt per Section 62.1.44.15:6.B of the Code of Virginia
Draft Permit Package Issued: February 14, 2002, Revised April 3, 2002
Public Notice Published: April 10, 2002
End of 30-Day Public Comment Period: May 10, 2002
Received Verification of Publication: May 6, 2002
Public Meeting or Hearing (if applicable): N/A

3. Project Location: The navigational dredging site is located 280 feet west of Walnut Point in the Coan River in Northumberland County, Virginia. The open water placement site is located in the Coan River at Public Ground (PG) 78.

City/County:	Northumberland County
Waterbody:	Coan River
Basin:	Potomac River
Subbasin:	Potomac River
Section:	1
Class:	II
Special Standards:	a
HUC:	2070011

Compensation Site City/ County:	N/A
Compensation Site Basin:	N/A
Compensation Site Subbasin:	N/A
Compensation Site HUC:	N/A

4. Project Description:

The permittee proposes to construct a new navigational channel to the west of Walnut Point in the mouth of the Coan River. The dimensions of the new channel will be 1,000 feet long by 100 feet wide to a depth of -12 feet MLLW (to include allowable overdepth). (Note: The Corps objected to standard wording in the permit and fact sheet regarding the -12 foot depth MLLW which was "to include advance maintenance and overdepth" The wording has therefore been struck from the permit but it is noted that the Corps understands that the depth specified includes advance maintenance). The channel will be hydraulically dredged and the 10,000 cubic yards (92% sand, 3% silt, 2% gravel, and 3% clay) of dredged material will be placed on Public Ground (PG) 78 for oyster bar restoration purposes.

The permittee also proposes construction of a 485 foot long jetty and a temporary tie-in road to access the jetty location, however no permit is required for this portion of the project. If submitted separately, this portion of the application would not require a permit or mitigation, therefore, these activities have been carved out of this permit as per Central Office advisement on October 22, 2001.

5. Project Impacts:

The proposed dredging and dredge material placement project results in no impacts to vegetated or non-vegetated wetlands. The open water placement of the mostly sand material will aid in the State's oyster bar restoration project. There will be some wetland impacts with the jetty tie-in road and a loss of state waters which shall occur with the jetty construction, however this portion of the project has been carved out of the permit per Central Office advisement as noted above. Water quality impacts are expected to be temporary and minimal provided the permittee abides by the conditions of the permit. Impacts have been avoided and minimized to the greatest extent practicable.

6. Avoidance and Minimization Efforts:

Due to the existence of oyster grounds throughout the proposed project area and adjacent areas, impacts to oyster grounds could not be avoided, only minimized. The channel dredging will result in an impact to a currently unproductive public oyster ground and a small portion on productive, privately leased oyster bed. The jetty will require the placement of fill (rock) in the oyster bar area. All of these impacts were minimized to the greatest extent practicable. A time of year restriction for work around the oyster beds will be adhered to as well as use of best management practices to minimize further impact to this resource. Dredging will be prohibited during the period June 1 through September 30 and December 1 through March 15, inclusive, per the application. Potential impacts to other aquatic species are expected to be minor and temporary in nature.

7. Compensation for Unavoidable Impacts:

No mitigation is required, since there are no proposed impacts to vegetated tidal wetlands from the dredging and dredged material placement project.

VWP 01-1614 Issuance Fact Sheet
Page 4

8. Site Inspection:

A site visit was conducted on February 7, 2002. This channel has a navigation problem due to sand filling in the channel. The Corps plans to enhance the dredging portion of the project by installing a 485 foot long jetty 100 feet east of Walnut Point in the Coan River. A temporary jetty tie-in road on private land will allow access so the jetty may be constructed. The dredging and jetty will be beneficial to future navigation and the open water placement at PG 78 will aid in oyster bar restoration.

9. Riparian Landowner Notification:

All 50 riparian landowners located adjacent to the impact area and within one-half mile downstream of each distinct impact area were notified on December 17, 2001 in accordance with 62.1-44.15:4.D of the Code of Virginia. Five people responded to the riparian notification. There were no objections to the project and four of the five respondents were in favor of the project.

The Northumberland County Administrator was notified of the pending application on November 9, 2001 and was further advised when the public notice went out on April 3, 2002. The Commissioner of Revenue was notified of the project on November 15, 2001 and provided DEQ with riparian owner address information on November 20, 2001. The Northumberland Board of Supervisors and the Northern Neck Planning District was also notified when the public notice went out on April 3, 2002. Local notification was in accordance with 62.1-44.15:4.D and 62.1-44.15:01.2 of the Code of Virginia.

10. Relevant Regulatory Agency Comments:

As part of the application review process, DEQ contacted the appropriate state regulatory agencies and coordinated with various federal regulatory agencies, including the United States Army Corps of Engineers (USACE). All relevant agency comments were addressed in the VWP individual permit Part I - Special Conditions. Therefore, the staff anticipates no adverse effect on water quality and fish and wildlife resources provided the applicant adheres to the permit conditions.

Summary of State Agency Comments and Actions

Agency comments were requested from the Department of Game and Inland Fisheries, the Virginia Marine Resources Commission, the Virginia Department of Health, the Department of Conservation and Recreation, and the U.S. Fish and Wildlife Service on November 15, 2001 in accordance with 62.1-44.15:5.F of the Code of Virginia and the November 2000 MOU between Department of Conservation and Recreation, Division of Natural Heritage and Virginia Department of Agriculture and Consumer Services.

The Department of Game and Inland Fisheries advised that there are no documented occurrences of threatened or endangered species within that project area and that they expect no adverse impacts to species under their jurisdiction as a result of the proposed project.

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The Department of Health advised that they have no objections to the issuance of this permit. The Bureau of Shellfish Sanitation, Richmond Office has advised that there will be no shellfish condemnation or closure as a result of this project.

The Virginia Marine Resources Commission has advised that the dredging activity is exempt by their statute. However, the open water placement does require Commission approval and they will issue a permit for this. The Corps has been working very closely with Habitat Division staff and Dr. Jim Wesson, their Oyster Replenishment Officer and they have located a section of public ground suitable for the open water placement of this sandy material. The ground is presently unsuitable, a "mucky bottom". The sandy dredge material will effectively cap the mucky bottom with material potentially suitable for the propagation of oysters. The open water placement site is located in public ground No. 78 and only a short distance from the dredge cut. VMRC staff is very much in favor of this manner of disposal finding that the public and private benefit outweigh any anticipated detriment. They believe the grain size of the material is sufficiently large enough that, with care, the material could be pumped to the disposal site and spread out using a subsurface pipe allowing the material to settle out faster.

The Department of Conservation and Recreation (DCR) indicated that there are documented natural heritage resources in the project area, however, due to the scope of the activity and the distance to the resource, they do not anticipate that this project will adversely impact these natural heritage resources.

Summary of Federal Agency Comments and Actions

The U.S. Army Corps of Engineers, Baltimore District, issued a Public Notice advising that they are conducting a public review of the Environmental Assessment (EA) of the proposed dredging and jetty construction project in the Coan River. The draft finding indicated No Significant Impact.

The United States Fish and Wildlife Service (USFWS) advised that they have no objection to the proposed project plan.

11. Changes in Permit Part I - Special Conditions Due to Public Comments:

The public notice was published in the Northumberland Echo on April 10, 2002.

No public comments were received during the public comment period. Therefore, no changes have been made to the permit conditions.

VWP 01-1614 Issuance Fact Sheet

Page 6

12. Permit Conditions Developed to Protect Water Quality:

The following conditions were developed to protect instream beneficial uses, to ensure compliance with applicable water quality standards, to prevent significant impairment of state waters or fish and wildlife resources, and to provide for no net loss of wetland acreage and function through compensatory mitigation and success monitoring and reporting.

Part I – Special Conditions:

Part A Authorized Activities:

- No. 1 addresses the activities authorized by this permit, including impact types and limits.
- No. 2 ensures that all conditions and limitations in the application and associated submittals will be adhered to for the entire permit term.
- No. 3 directs the permittee to notify DEQ of additional impacts to state waters.
- No. 4 addresses the permit term. The applicant, on February 7, 2002, indicated the 10 year permit term was necessary to insure that permit conditions are completed.
- No. 5 qualifies that the permit does not satisfy the requirements of a Virginia Pollutant Discharge Elimination System permit.

Part B Standard Project Conditions:

- No. 1 addresses the requirement for the minimization of adverse impacts to instream beneficial uses.
- Nos. 2, 6, 10, 12, and 14 provide requirements and limitations on the entry of various materials (including concrete, fill, construction and waste material, fuels, lubricants, and untreated stormwater runoff) into state waters.
- No. 3 ensures that dredging and filling operations will minimize stream bottom disturbances and turbidity.
- No. 4 ensures that the project will be executed in a manner so as to minimize impacts to instream beneficial uses by imposing limitations on the disruption of the movement of aquatic life, and setting requirements for the maintenance of low flow conditions, provision for high flows, and minimization of adverse effects on navigation.
- No. 5 requires that the permittee adhere to time-of-year restrictions recommended by the Department of Game and Inland Fisheries or the Virginia Marine Resources Commission for the protection of fish and wildlife resources. This is a customized condition developed for use in the Piedmont Regional Office.
- No. 7 requires that Water Quality Standards downstream of the construction area must not be violated as a result of the site activities. The word "construction" was substituted for the word "project" that was used in the permit manual.

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Page 7

Nos. 8 and 9 require the use of erosion and sedimentation controls during excavation and construction operations to minimize sedimentation of surface waters.

No. 11 limits the use of machinery and equipment in surface waters to protect beneficial uses.

Note: No. 15 from the permit manual was deleted in lieu of Part I, E.12 .

No. 13 requires maintenance of continuous flow of perennial springs for the protection of instream beneficial use.

No. 15 determines that the permit does not take into consideration the structural stability of any proposed structure.

Note: Nos. 16, 17, and 18 from the manual dealing with impacts to wetlands have been deleted from the permit as they are not relevant to the dredging and open water placement activities authorized in the permit. They would relate to the jetty and access road but this portion of the project has been carved out of this permit due to Central Office advisement.

Part C Construction Monitoring

No. 1 requires photographs of the construction so that the board may track the progress of the project and monitor permit compliance, modified with clarifying language requiring photographs to be representative of site conditions. The permit manual requirement for the photographs to be taken at the end of the first, second and twelfth months of construction and then annually for the remainder of the construction project seemingly conflicts with condition D.10.b. requiring their submittal as part of the quarterly report, so that sentence was deleted from this condition. Due to the Corps' objections, C.1 has also been modified to delete the requirement to document pre construction conditions and post construction conditions as all work is being done in open water.

A permit manual condition requiring water quality monitoring to ensure compliance with the Water Quality Standards was deleted as it is superfluous with the condition B.7 which states that water quality standards shall not be violated.

No. 2 is a customized condition used in the DEQ-PRO that requires the permittee to provide for monitoring any spills during the construction process. These provisions shall be sufficient to detect and contain any spill and notify the appropriate authorities. This condition sets up the mechanism for spill detection that is reported in accordance with condition D.5.

A permit manual condition requiring the measurement of stream bottom elevations at road crossings was removed. Because the jetty access road is not part of this permit, per Central office advisement, this condition is not considered relative and has, therefore, been deleted.

Monitoring for Dissolved Oxygen was not believed to be necessary and, therefore, not included in the permit due to the high sand and gravel content of the dredged material.

Part D Required Notifications and Submittals

Nos. 1 through 10 list the notification, submittal, and reporting requirements to ensure compliance with all permit conditions.

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Page 8

No. 9 is customized with previously approved standard condition language for the submittal of a quarterly report.

A permit manual condition requiring the submittal of final Plans and Specifications has been deleted as it is not applicable to this permit and not considered relative to addressing activities in the permit.

Two permit manual conditions regarding compensatory mitigation monitoring and stream mitigation monitoring have been deleted as they are not applicable to this permit.

Part E Dredging and Disposal

Nos. 1, 2, and 5 provide limits for dredging to avoid and minimize disturbance and prevent unpermitted impacts.

No. 3 prohibits double handling of dredge material to prevent unpermitted impacts to surface waters. This condition is not interpreted to mean that it will apply to the subsequent open water placement at PG 78.

No. 4 provides guidance for hydraulic dredging to prevent unpermitted impacts to surface waters and requires using a pipeline to transport the dredged material from the cutterhead to the disposal site.

Nos. 6, 7, and 8 relate specifically to this project and to the allowable dredge cut specifications and quantity of material to be dredged.

No. 9 specifies a time restriction for dredging as per the application.

No. 10 prohibits any hazardous material being discharged at the disposal site.

No. 11 defines the requirements for navigation channels. In No. 11.a., the second sentence from the manual has been deleted; dredging will occur over 200 feet from the shoreline so the flagging requirement is not believed to be necessary.

No. 12 requires a bathymetric survey following dredging activities.

Part II - General Conditions:

General Conditions are applied to all VWP individual permits, as stated in the VWP Permit Program regulation.

13. General Standard:

This project may result in negligible, temporary impacts to beneficial uses related to the propagation and growth of aquatic life as defined in the General Standard. Provided the permittee abides by the conditions of the permit, no substances shall enter state waters in concentrations, amounts or combinations that would contravene established standards or interfere with beneficial uses or are inimical or harmful to human, animal, plant, or aquatic life.

14. Staff Recommendations:

Based on the review of the permit application, the staff provides the following determinations.

VWP 01-1614 Issuance Fact Sheet
Page 9

- The proposed activity is consistent with the provisions of the Clean Water Act and State Water Control Law, and will protect instream beneficial uses.
- The proposed permit addresses avoidance and minimization of wetland impacts to the maximum extent practicable.
- The effect of the impact, together with other existing or proposed impacts to wetlands, will not cause or contribute to significant impairment of state waters or fish and wildlife resources.
- This permit is proposed to prevent unpermitted impacts.

The staff provides the following recommendations:

- (1) Find the above determinations to be appropriate.
- (2) Approve the attached VWP individual permit and conditions.
- (3) Direct the staff to issue VWP Individual Permit Number 01-1614.

Approved: _____

James J. Golden (for)
Water Permit Manager

Date: _____

5/21/02

NORTHUMBERLAND COUNTY WETLANDS PERMIT

KEEP FOR YOUR RECORDS

Effective Date: October 15, 2001

Pursuant to Title 28.2-1302 of the Code of Virginia (1950), as amended, the Northumberland County Wetlands Board, hereinafter referred to as the Board hereby grants unto Army Corps of Engineers hereinafter referred to as the permittee, permission to undertake the following described project:

To dredge a new navigational channel to the west of Walnut Point to improve navigational access at the mouth of the Coan River, construct a new 480' stone jetty, and dispose of the dredge material in a upland agricultural field at Walnut Point, Tax Map Parcel #11-1-1.

For a more complete description of such project, reference is hereby made to permittee's application for wetlands permit, V.M.R.C. No. 01-1614 which application is attached hard and made a part hereof.

This permit is granted subject to the following terms and conditions:

1) Except as hereinafter provided, all phases of the project shall conform in all particulars to the permittee's application for wetlands permit. The duly authorized agents of the Board and Marine Resource Commission shall have the right to enter upon the premises at any reasonable time for the purpose of inspecting the work being done pursuant to this permit.

2) Permittee shall, comply with all applicable laws, ordinances, rules and regulations affecting the conduct of the project. The granting of this permit shall not relieve the permittee of the responsibility of obtaining any and all other permits or authority required by the Department of Environmental Quality, the U. S. Army Corps of Engineers, and the Virginia Marine Resource Commission.

3) The permittee shall, to the greatest extent practical, minimize the adverse effects of the project upon adjacent properties and wetlands and upon the natural resources of the Commonwealth: The recommendations of VIMS concerning the access road across the wetlands are to be followed.

4) The project shall be completed on or before October 15, 2002, after which time this permit shall be void; provided, however, that upon proper application to the Board, the item for the completion of the property may be extended by the Board at its discretion. Any such application for extension of time shall be in writing prior to the expiration date hereof and shall specify the reasons for such extension and the expected date of completion of the project.

5) This permit may be revoked at any time by the Board upon the failure of the permittee to comply with any of the terms and conditions hereof.

6) The permittee, his agent, or the contractor must notify the Board at the commencement and completion of the project and no project is considered complete and in compliance until all necessary erosion control measures are in place and all graded areas have been adequately stabilized.

7) Such other terms and conditions peculiarly applicable to the particular project being permitted in order to promote the greatest extent possible the public policy expressed in the Act and to minimize the impact of the project upon the right and property of others and upon the ability of the local government to provide governmental services. (To be inserted after #3)

IN WITNESS WHEREOF, the County of Northumberland, Virginia, Wetlands Board has caused this present to be executed in its behalf by GEORGE REW, Chairman, whose signature is affixed hereto as evidence of his acceptance of the terms and conditions hereof.

County of Northumberland, Virginia
Wetlands Board

By: George C. Rew

Cheryl L. Janiszewski
Permittee or Agent

STATE OF VIRGINIA,
County of Northumberland, to-Wit:

I, WELLINGTON H. SHIRLEY, JR., a notary public in and for said state and County, hereby certify that GEORGE REW, Chairman, Northumberland County Wetlands Board, whose name is signed to the foregoing Wetlands Permit, has this day personally appeared before me on 4th day of OCT, 2001.

Wellington H. Shirley
Notary Public

My Commission expires on JULY 31, 2002.

STATE OF Maryland,
County of Baltimore, to-Wit:

I, Mary E. Daly, a notary public in and for said state and County, hereby certify that Cheryl L. Janiszewski, Permittee or Agent, whose name is signed to the foregoing Wetlands Permit, has this day personally appeared before me on 31 day of October, 2001.

Mary E. Daly
Notary Public

My Commission expires on 5/1/2004.

NORTHUMBERLAND COUNTY, VIRGINIA

Office of Building and Zoning

P.O. Box 129, Heathsville, Virginia 22473 Voice (804)580-8910, Fax (804)580-8082, wshirley@co.northumberland.va.us

MEMORANDUM

TO: Wetlands Applicant or Agent

FROM: Wellington H. Shirley, Jr., Wetlands Agent

DATE: October 15, 2001

SUBJECT: Enclosed Wetlands Permit

Please find enclosed your permit for the Wetlands project for which you applied. Please sign it, have it notarized and return to me or come by my office and I will notarize the permit. A copy of the permit is enclosed for your records.

*The bright FLUORESCENT card **MUST** be posted (facing the water) prior to any marine construction and remain on the site 10 to 20 days after the project has been completed. You must inform this office prior to beginning work and after the work has been completed. The project will be inspected at this time in order to check for compliance with what was approved. PLEASE NOTE THAT NO PROJECT IS COMPLETE AND IN COMPLIANCE UNTIL ALL NECESSARY EROSION CONTROL MEASURES ARE IN PLACE AND ALL GRADED AREAS HAVE BEEN ADEQUATELY STABILIZED.*

If you have any questions please feel free to contact our office.

Enclosures:

WETLANDS PERMIT

Northumberland County, Virginia
Wetlands Permit Section
P. O. Box 129
Heathsville, Virginia 22473

No.: 01-1614
Date: October 15, 2001
Expiration Date: October 15, 2002

Permit to: CONSTRUCT _____ REPLACE _____ ALTER _____ OTHER Dredge
To dredge a new navigational channel

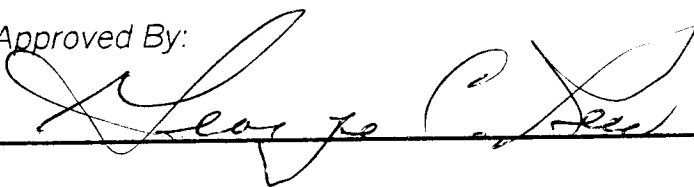
OWNER
Army Corps of Engineers/Baltimore Dist.
P.O. Box 1715
Baltimore, MD 21203-1715

AGENT
SAME

CONTRACTOR
~~James~~

LOCATION
Coan River west of Walnut Point

SPECIAL CONDITIONS: The recommendations
of VIMS concerning the access road across
the wetlands are to be followed.

Approved By: 

WETLANDS PERMIT

This permit is issued in accordance with regulations set forth in the Northumberland County Wetlands Zoning Ordinance. Construction must be located on the property and shoreline in the exact position shown on the plan submitted with the application. This project must be completed within the approved time and may be revoked at any time by the board upon the failure of the permittee to comply with any of the terms and conditions set forth.

POST THIS CARD SO IT IS VISIBLE FROM THE WATER

THE PERMITTEE, AGENT OR CONTRACTOR MUST NOTIFY THE
WETLANDS BOARD AT THE COMMENCEMENT AND COMPLETION
OF THE PROJECT.

WETLANDS PERMIT

Northumberland County, Virginia
Wetlands Permit Section
P. O. Box 129
Heathsville, Virginia 22473

No.: 01-1614
Date: October 15, 2001
Expiration Date: October 15, 2002

Permit to: CONSTRUCT _____ REPLACE _____ ALTER _____ OTHER Dredge
To dredge a new navigational channel

OWNER
Army Corps of Engineers/Baltimore Dist.
P.O. Box 1715
Baltimore, M.D. 21203-1715

AGENT
SAME

CONTRACTOR
[Signature]

LOCATION
Coan River west of Walnut Point

SPECIAL CONDITIONS: No recommendations
of VIMS concerning the access road across
the wetlands are to be followed.

Approved By: [Signature]

WETLANDS PERMIT

This permit is issued in accordance with regulations set forth in the Northumberland County Wetlands Ordinance. Construction must be located on the property and therefore in the county. The project must be completed within the approved time period. The permit is void if not used within the time period. The permit is void if the permittee fails to comply with any of the terms and conditions of the permit.

POST THIS CARD SO IT IS VISIBLE FROM THE WATER

THE PERMITTEE, AGENT OR CONTRACTOR MUST NOTIFY THE
WETLANDS BOARD AT THE COMMENCEMENT AND COMPLETION
OF THE PROJECT.

VIMS Shoreline Permit Application Report # 01-1614

APPLICANT:	U.S. ARMY CORPS OF ENGINEERS
Immediate Waterway:	Coan River
Locality:	NORTHUMBERLAND COUNTY
Purpose:	Improve Navigation
Application Type:	Wetlands, Subaqueous
Site Inspection:	9/20/01
Report Date:	10/2/01

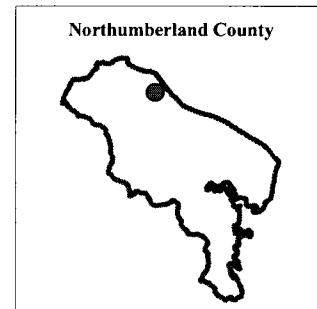


Type of Activity

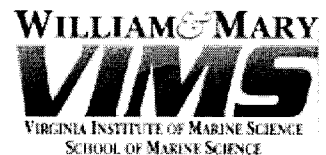
Proposed Extent

Project Location

Groins (ft)	485
Groins	1 Unit(s)
Impact Brackish Water Mixed Community (Type XII) (ft2)	1950
Impact Sand/Mud Mixed Flat Community (Type XV) (ft2)	526
Fill Sand/Mud Mixed Flat Community (Type XV) (ft2)	263
Fill Brackish Water Mixed Community (Type XII) (ft2)	975
Impact Subaqueous Bottom (ft2)	17800
Fill Subaqueous Bottom (ft2)	8900
Aquatic Disposal (ft2)	267023
Aquatic Disposal (yd3)	6000
Fill Subaqueous Bottom (ft2)	267023
New Dredging (yd3)	6000
Impact Subaqueous Bottom (ft2)	34320
Temporary Fill (ft2)	9700
Fill Brackish Water Mixed Community (Type XII) (ft2)	9700



Virginia Institute of Marine Science
School of Marine Science
P.O. Box 1346, Route 1208 Greate Road
Gloucester Point, Virginia 23062-1346
phone: (804)684-7380, fax: (804)684-7179, e-mail: wetlands@vims.edu



Shoreline Permit Application Report VMRC # 01-1614

Total Impacts (ft2)	54596
Total Impacts (Wetlands)	2476
Total Impacts (Subaqueous)	52120
Total Impacts (Beach/Dune)	0
Total Built (ft2)	0
Total Built (Wetlands)	0
Total Built (Subaqueous)	0
Total Built (Beach/Dune)	0
Total Fill (ft2)	286861

VIMS Shoreline Permit Application Report # 01-1614

ANNOUNCEMENT

Information provided in this report is only the environmental and marine resources input into the decision making process and is based on biological, chemical, geological, and physical factors affecting the marine environment at and in the vicinity of the proposed activity. Parameters of the marine environment which may influence recreational, commercial, or industrial activities which are dependent on the marine environment are also considered where applicable.

The Virginia Institute of Marine Science (VIMS) is aware that regulatory or administrative bodies who weigh the overall potential public and private benefits and detriments in arriving at decisions must also consider other factors such as economics, aesthetics, zoning, or community desires.

Comments:

This project by the U.S. Army Corps of Engineers includes dredging a new navigation channel at the mouth of the Coan River and construction of a 485-foot stone jetty. The 6000 cubic yards of dredge material will be placed either in an upland agricultural field or on Public Ground 78 for oyster restoration purposes. A temporary construction access road through tidal wetlands is also required for equipment to reach the proposed jetty site.

Channel Dredging

The Coan River is a productive growing area for oysters and there are extensive private leases and public oyster grounds in the project vicinity. The channel location has been negotiated with lease holders and VMRC to minimize the amount of dredging needed while also minimizing impacts to productive oyster grounds. The channel will be dredged hydraulically and the target depth is 11 feet below mean low water. Temporary dredging induced turbidity should not be severe due to the proposed method and the high percentage of sand in the bottom sediments. However, if there is direct marketing of shellfish from adjacent leases within 500 yards of the channel, then time of year restrictions are recommended during critical spawning and harvest periods (July-September, December-February).

Dredge Material Disposal

Two potential dredge material disposal sites have been identified. An agricultural field nearby provides a location for a bermed upland disposal area. An alternative aquatic disposal site has also been identified on 6 acres of Public Ground 78 located northeast of the jetty. The material will be pumped to existing unproductive, soft bottom in water depths of 12-14 feet to provide a substrate for future deposition of oyster shell. Although sediment analysis indicates the dredge material is mostly sand, there is enough silt to warrant careful handling of the material. If there are productive oyster resources within 500 yards of the disposal site, then a directed, subsurface discharge as close to the bottom as possible would minimize siltation of the adjacent oyster resources. Monitoring of the disposal area is also suggested to study the fate of the material and the effects on oyster reproduction to evaluate the feasibility of this approach.

Jetty

The nearshore littoral transport in the area is mostly from east to west. The proposed 485-foot jetty at the west end of the Walnut Point spit is intended to intercept sand and retain it on the east side of the jetty. This will result in accretion of sand along the eroding north shoreline of the point and will minimize the amount of

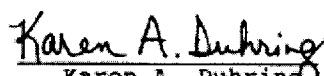
material transported into the new channel. The area of the spit located west or downdrift of the jetty may be deprived of sand and the existing shoreline may change as a result of jetty construction.

Jetty Access Road

Construction access from the water is prohibited by shallow water depths in the vicinity and additional dredging would be required. A temporary access road is proposed which will impact approximately 9700 square feet of tidal wetlands located at the west end of Walnut Point. Geotextile material will be placed underneath the road base to minimize settling and compaction as a result of heavy equipment traffic. Upon completion of the project, the access road through wetlands will be removed. The natural wetland vegetation is expected to re-colonize the disturbed area and no additional restoration activities are planned by the applicant after road removal. A post-construction monitoring period of at least 1 year is recommended to ensure the wetland area recovers as expected. If the wetland vegetation does not become re-established or if existing stands of Phragmites become invasive as a result of the disturbance, then additional activities may need to be considered to restore the area to pre-construction conditions.

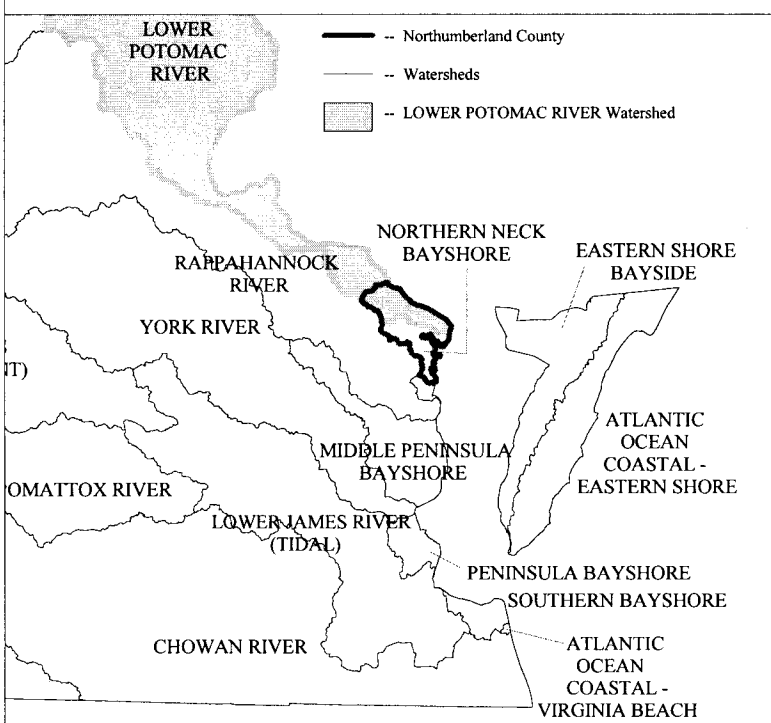
Summary of Recommendations

Time of year restrictions to protect shellfish resources are recommended for the channel dredging. If the dredge material will be placed on Public Ground 78 and there are productive oyster resources within 500 yards, then a subsurface discharge as close to the bottom as possible is recommended. Monitoring the aquatic disposal site to determine the feasibility of this beneficial use is suggested. A post-construction monitoring period of at least 1 year is also recommended to ensure recovery of the tidal wetland after removal of the temporary access road.


Karen A. Duhring
Marine Scientist

VIMS Shoreline Permit Application Report # 01-1614

LOWER POTOMAC RIVER Watershed



Total Permitted Wetlands Loss by Type for LOWER POTOMAC RIVER : 1996-1999

Community Type	Extent
Vegetated Wetlands	143892 ft2
Non-Vegetated Wetlands	126780 ft2
Subaqueous Bottom	93578 ft2

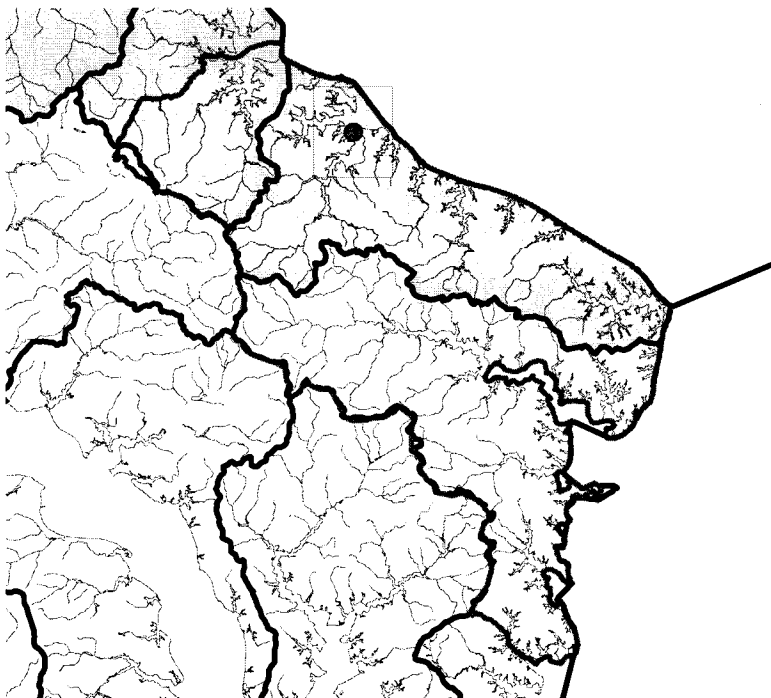
Total Permitted Wetlands Loss by Type for Northumberland County : 1996-1999

Community Type	Extent
Vegetated Wetlands	20202 ft2
Non-Vegetated Wetlands	108479 ft2
Subaqueous Bottom	68037 ft2

Total Proposed Shoreline Structures and Activities for Northumberland County -- 1996-1999

Structure Type	Extent
Boat Ramps	2032 ft2
Boat Ramps	1 Openpile
Breakwater	930 ft
Bulkhead	8127 ft
Commercial Structure	12280 ft2
General Fill	60135 ft2
Groins	352
Groins	4268 ft
Bulkhead Toe Protection	2097 ft
Bulkhead Replacement	1327 ft
Beach Nourishment	20850 ft2
Beach Nourishment	810 ft
New Dredging	1238 yd3
Maintenance dredging	247 yd3
Riprap	34104 ft
Submarine Crossings	160 ft

Northumberland County



Hydrologic units represent smaller, isolated watersheds defined by topography and flow direction. These units can be thought of as insulated ecosystems or landscapes within which resources can be managed at a larger scale. The cumulative impact of a project to resources within a hydrologic unit may be significantly greater than the impact to the larger watershed above.

Permit Site Study Area

Northumberland County
LOWER POTOMAC RIVER
Coan River

Project site



Lower Potomac River watershed



Tidal Marsh Inventory - TMI

- Arrow Arum-Pickerelweed
- Big Cordgrass
- Black Needlerush
- Brackish Water Mixed
- Cattail
- Freshwater Mixed
- Reed Grass
- Saltbush
- Saltmeadow
- Saltmarsh Cordgrass
- Yellow Pond Lily

Roads

- Primary
- Secondary
- Tertiary

Open water



0 0.5 1 Miles





Permit # 01-1614

Commonwealth of Virginia Marine Resources Commission Authorization

A Permit has been issued to: U. S. Army Corps of Engineers
ATTN: Mr. Wesley Coleman
Baltimore District
P.O. Box 1715
Baltimore, Maryland 21203-1715

The Permittee is hereby authorized to:

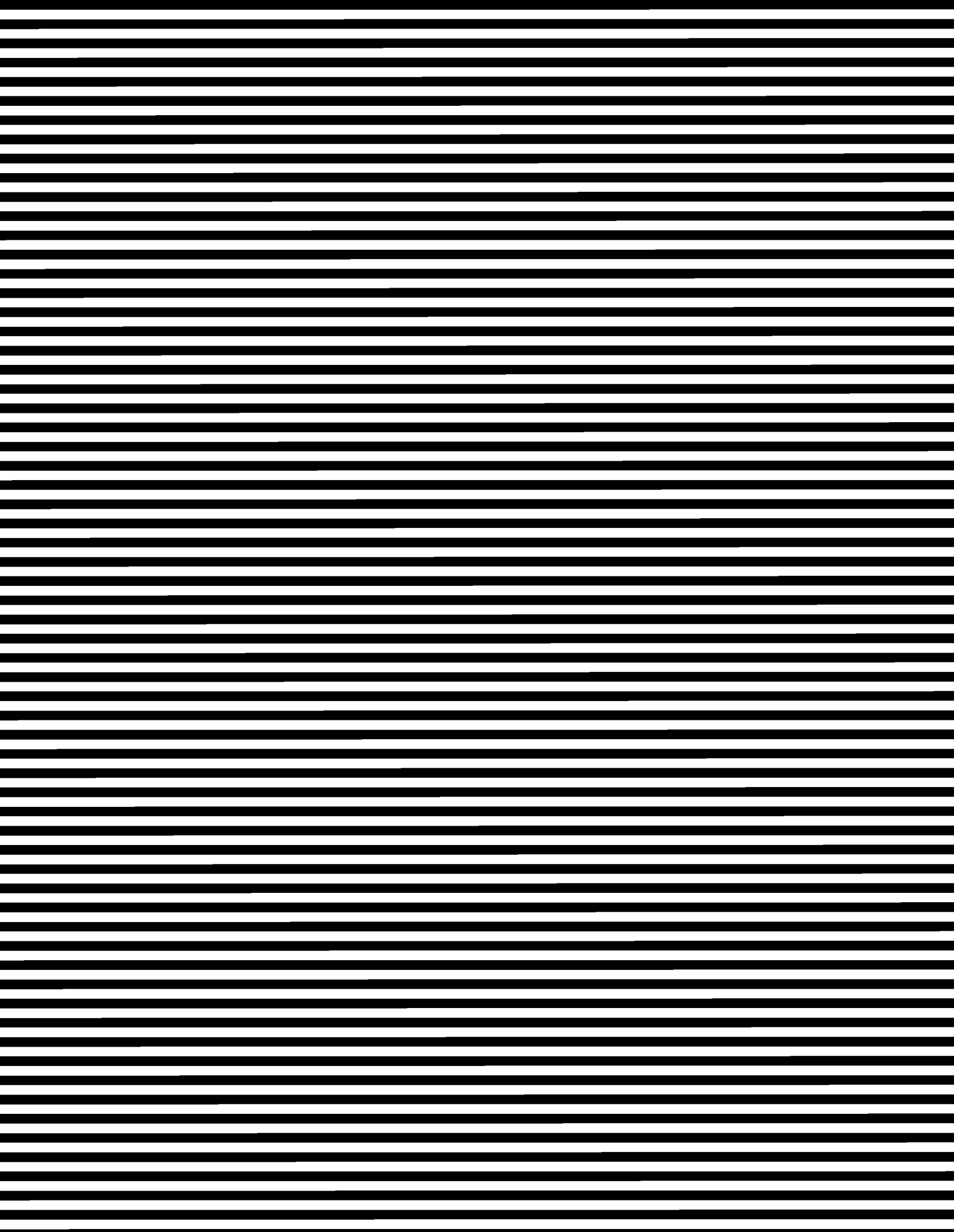
Install an approximately 485-foot long by 45-foot wide continuous height riprap jetty which will extend approximately 400 feet channelward of mean low water at the mouth of the Coan River and to place approximately 6,000 cubic yards of sandy material onto Public Ground #78 in conjunction with the dredging of the Coan River federal navigation channel in Northumberland County.

Issuance Date: 2-26-2002

Expiration Date: 2-26-2005

Commissioner or Designee

This Notice Must Be Conspicuously Displayed At Site Of Work



Sir/Madam:

Please be advised that I will commence work on 01-1614 *on*
(Permit Number)

in Coan River/Northumberland County
(Date) *(Waterway)* *(City/County)*

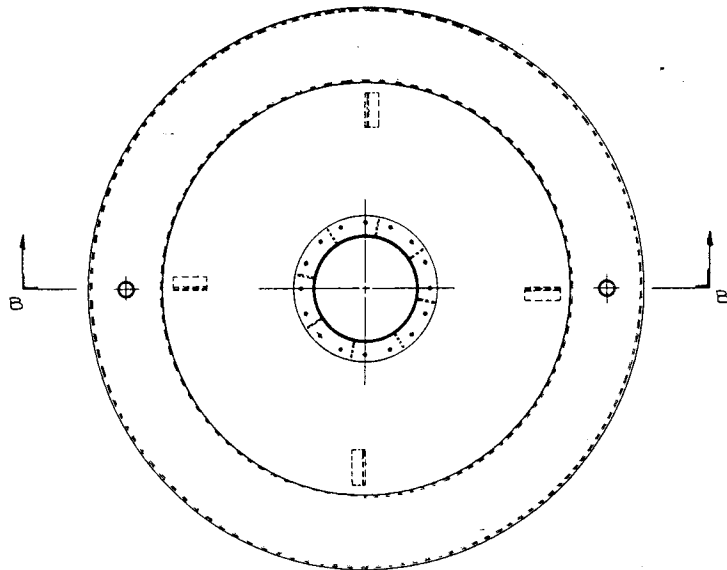
I expect the work to be completed no later than _____

Attention: Jeffrey P. Madden
(Environmental Engineer)

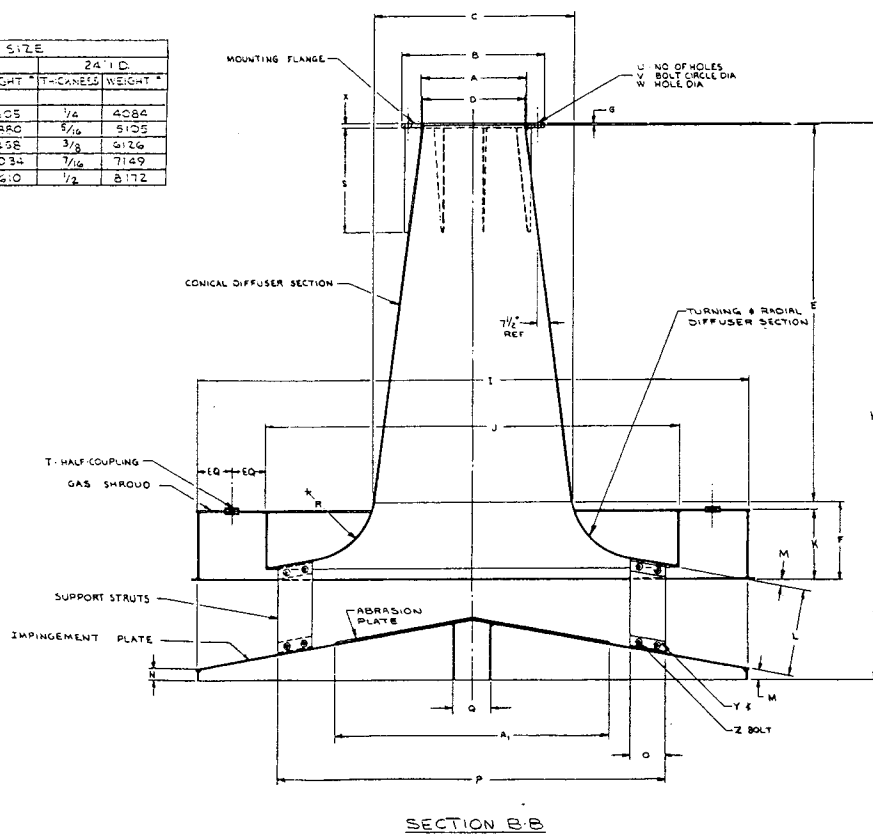
(Name of Permittee)
Army Corps of Engineers

DIFFUSER PROCESSOR DESIGN

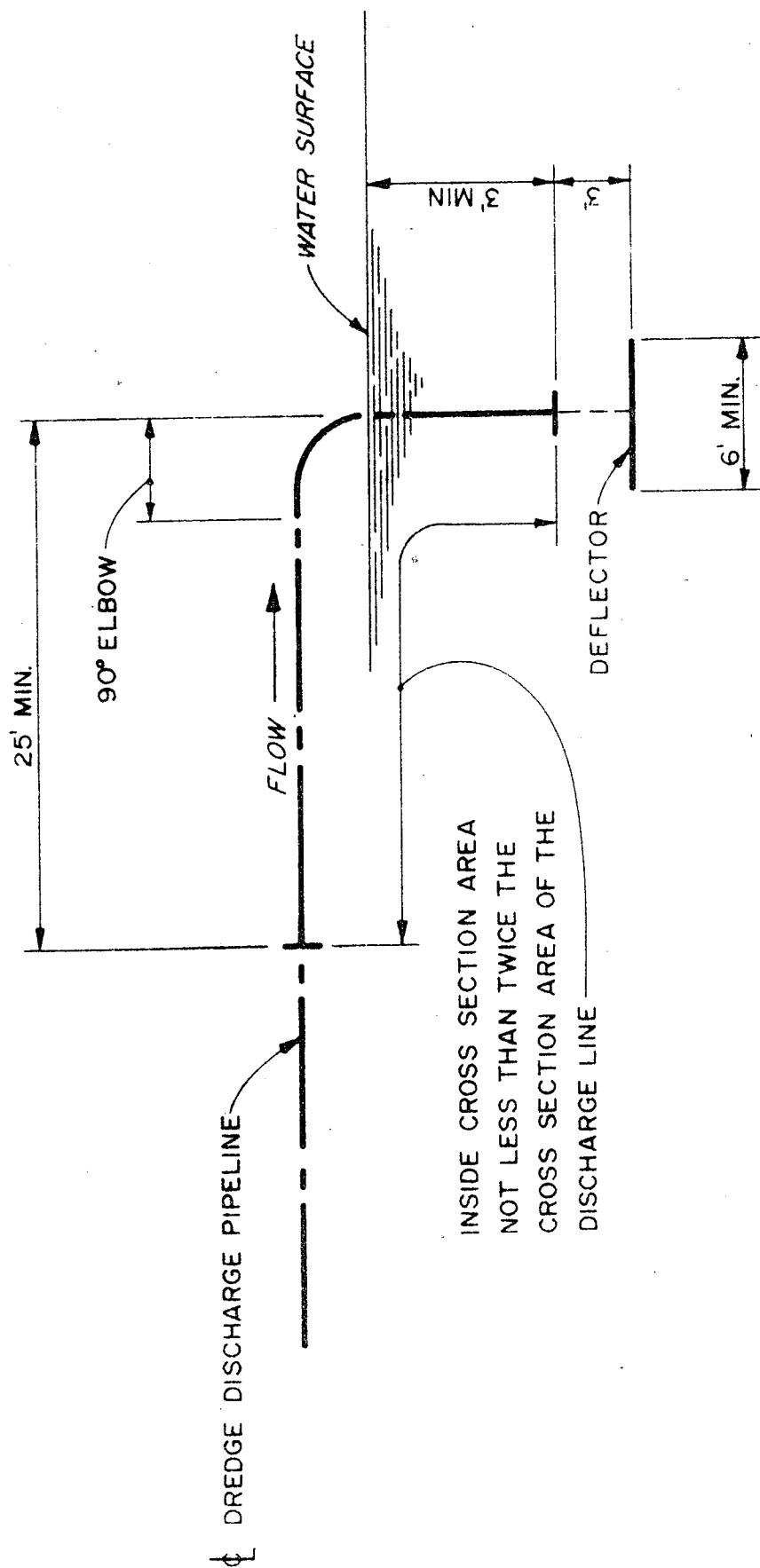
DIMENSION	12'	18'	24'
A	12 3/16	18 3/8	24 3/8
B	19	25	32
C	23 3/8	35 3/8	44 1/8
D	12 3/16	18 1/4	24 3/16
E	45.4	65	86 1/8
F	9 3/16	13 3/16	18 7/16
G	1 7/32	9/32	9/32
H	64 1/8	96 1/16	127 3/8
I	64 1/8	96	127 1/8
J	48 1/16	72	95 1/16
K	8	12	15 1/8
L	10	15	19 1/8
M	10"	10"	10"
N	1 3/8	2	2 3/4
O	4	6	8
P	45 3/8	68	90 1/8
Q	4 1/2 (1.14)	6 3/8 (1.65)	8 3/8 (2.16)
R	8	12	15 7/8
S	12	18	24
T	1 1/2 NPT.	2" NPT.	2 1/2 NPT.
U	12	16	20
V	17	22 3/4	29 1/2
W	1"	1 1/4	1 3/8
X	10/16	3/4	1"
Y	1 1/2 x 1 1/2 x 1/4	2 x 2 x 3/8	2 1/2 x 2 1/2 x 1/2
Z	3/8 - 16	1/2 - 13	5/8 - 11
A ₁	32"	48"	64"

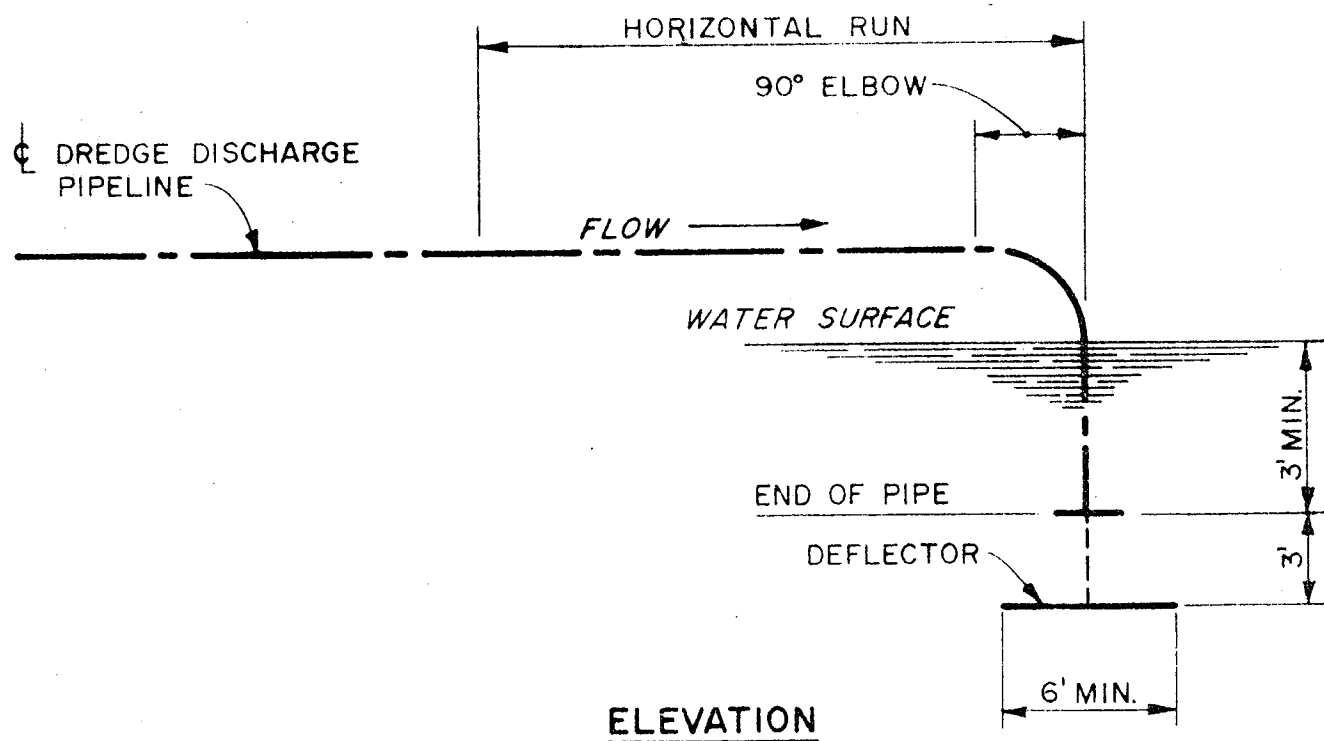
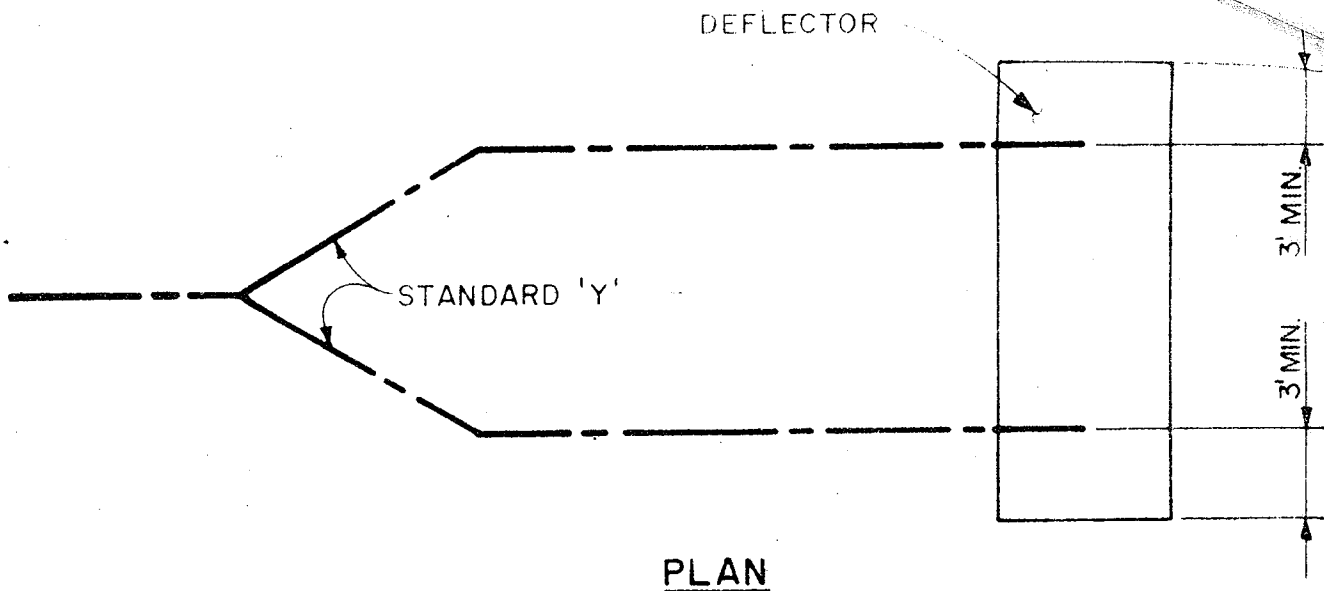


DREDGE PIPE SIZE					
12" I.D.		18" I.D.		24" I.D.	
THICKNESS	WEIGHT	THICKNESS	WEIGHT	THICKNESS	WEIGHT
3/16	800	1/8	2305	1/4	4084
1/4	1332	3/16	2880	3/8	5105
5/16	1596	1/2	3458	3/4	6126
		3/4	4034	1 1/4	7149
		1 1/2	4610	1 3/4	8172



REFERENCE: Neal, Robert w, et al., 1978. Evaluation of the submerged discharge of dredged material slurry during pipeline dredge operations, Technical Report D-78-44, U.S. Army Engineer Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi. page 43





NOTES:

1. ALL PIPE THE SAME DIAMETER
2. THE DEFLECTOR PLATE MAY BE FABRICATED AS ONE PLATE OR TWO PLATES, MINIMUM SIZE 6' x 6'.